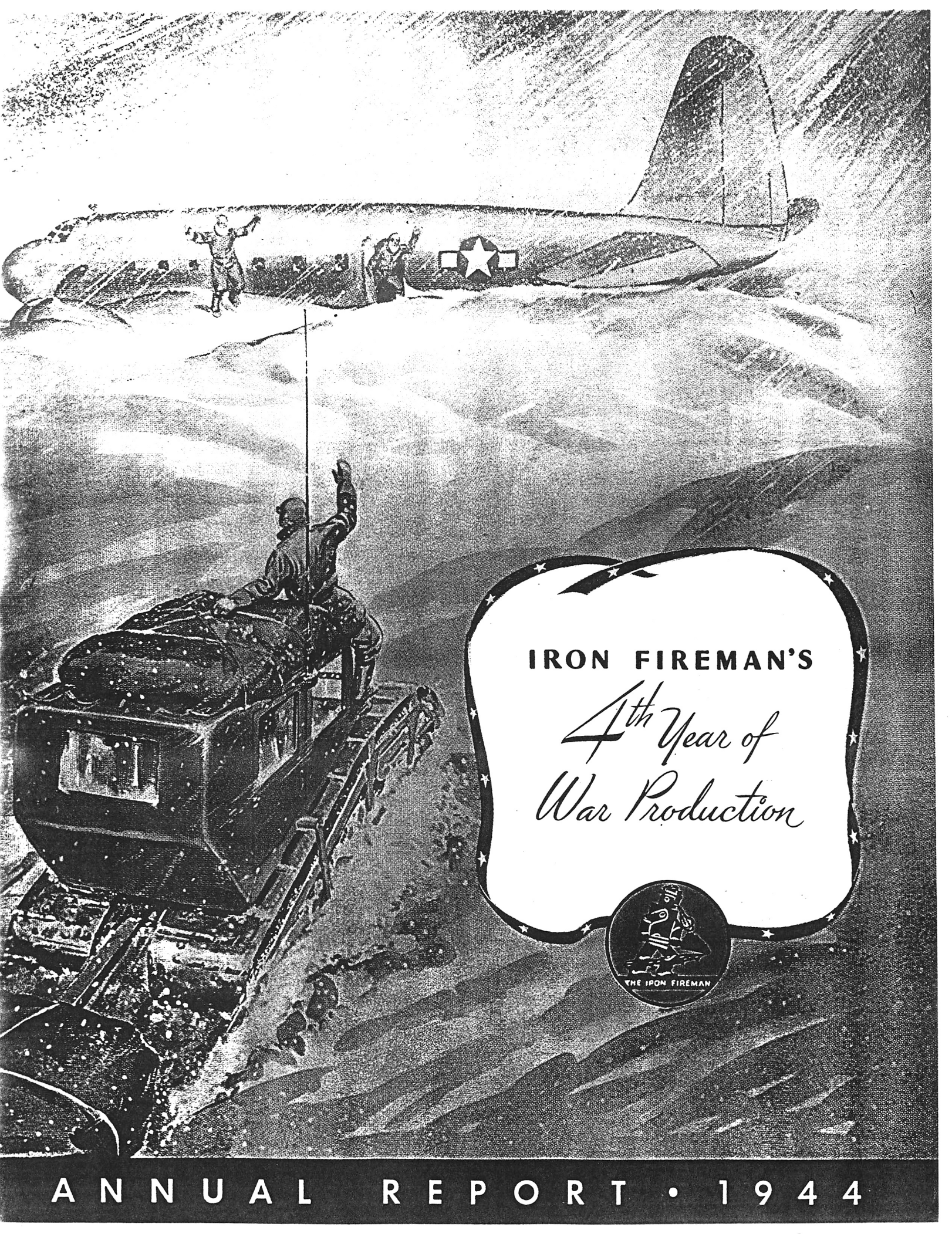

IRON FIREMAN'S
4th Year of
War Production
THE IRON FIREMAN
ANNUAL REPORT • 1944

BOEING AIRCRAFT COMPANY

SEATTLE 14, WASHINGTON

March 7, 1945

IN REPLY REFER TO REFERENCE NO.
PH-94275

IRON FIREMAN MANUFACTURING COMPANY
4784 S. E. 17th Avenue
Portland 7, Oregon

Attention: Mr. T. H. Banfield, President

Subject: B-29 Superfortress Airplanes

Gentlemen:

Your company is a key subcontractor supporting the Boeing B-29 Superfortress bomber production program. The tactical importance of the B-29 Superfortress in the Pacific Theater is well known.

Boeing is entirely dependent upon your ability to deliver on schedule a number of important parts and assemblies for the B-29. Among the most important of these items are the Landing Gear Supports, Wing Fittings, and the Hand Retraction Gear Mechanisms. The value of the work we have placed in your plant is over $4,000,000.00. You are also manufacturing the Hand Retraction assemblies for the other prime contractors participating in the B-29 program.

This company has not the capacity or equipment to produce the articles you are furnishing for the B-29. An extensive survey was made by Boeing, AAF Western Procurement District and ATSC, Wright Field, which failed to reveal any other source for the above-mentioned Landing Gear Supports.

It will be apparent failure on the part of Iron Fireman to produce in accordance with established schedules would immediately render Boeing unable to deliver the scheduled number of B-29 airplanes to the Army Air Forces.

We have the utmost confidence in the ability of your organization to supply all requirements on schedule. This confidence is occasioned by the superlative performance of Iron Fireman as a subcontractor on the Boeing B-17 production program now nearly complete.

Very truly yours,

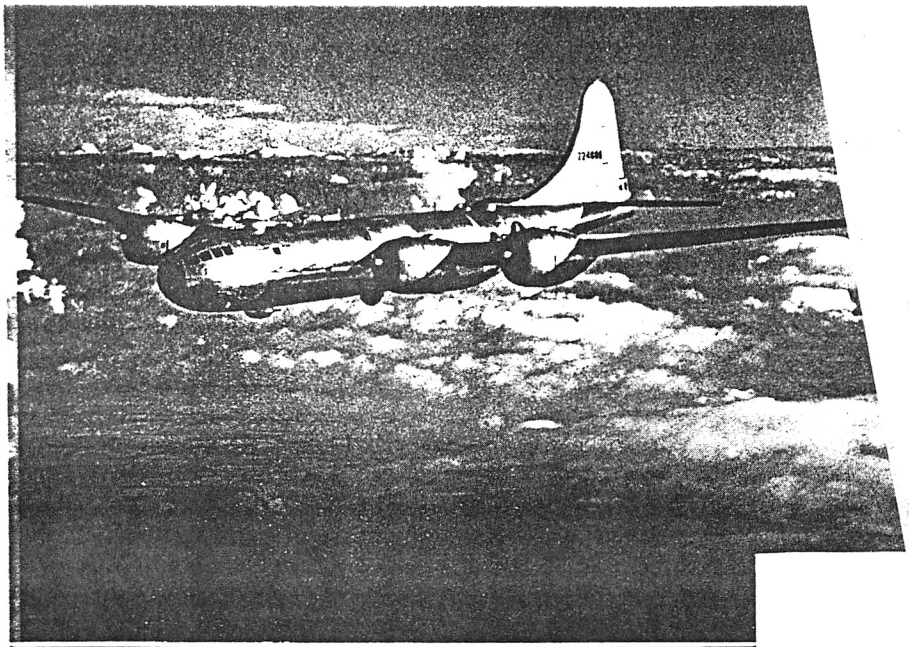
BOEING AIRCRAFT COMPANY

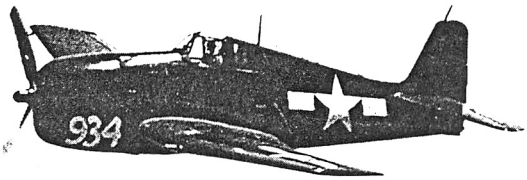
C. B. Gracey

C. B. Gracey
Materiel Manager

CBG:lf

THE IRON FIREMAN



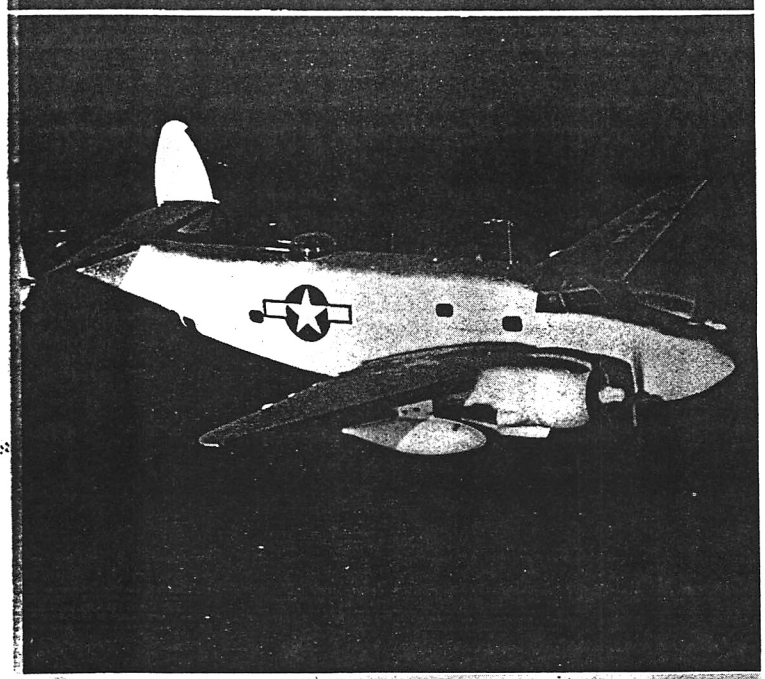


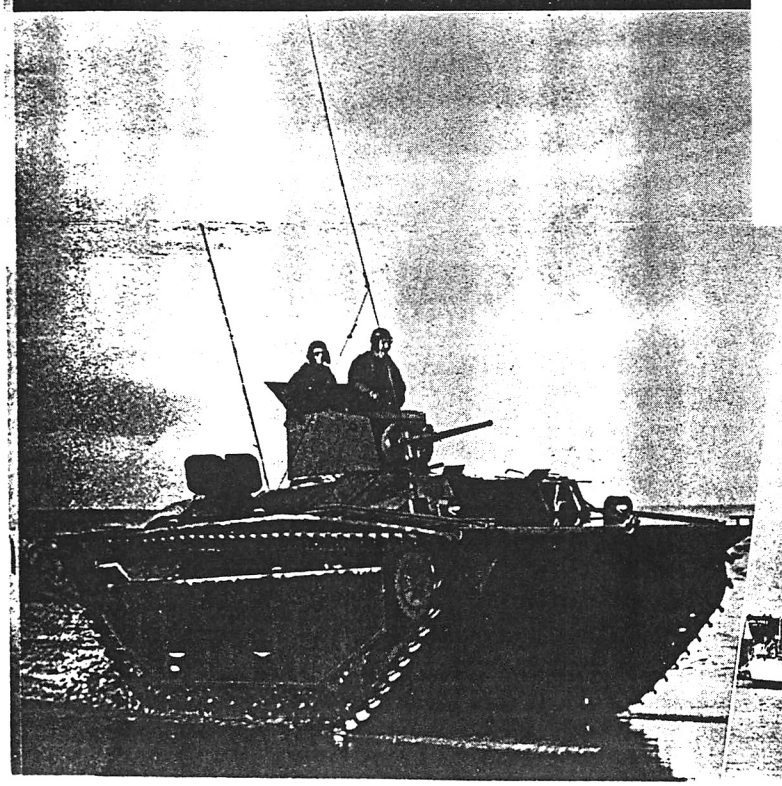
for the Fourth

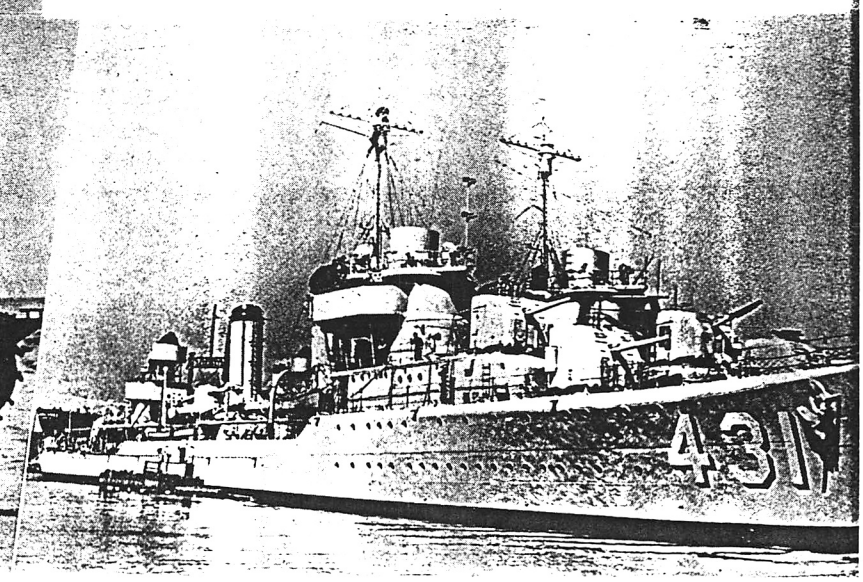
IRON FIREMAN HA

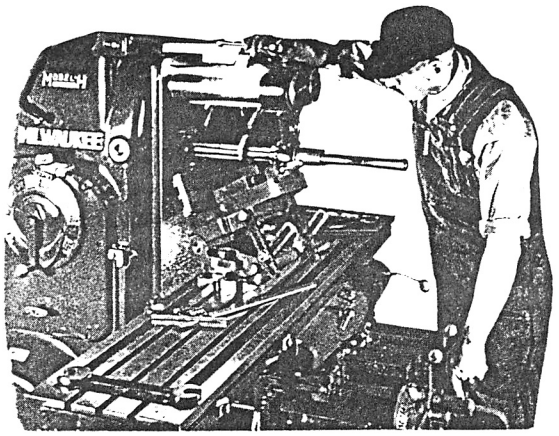
In the first months of the war, when practically all news was bad news, we in industry hung on grimly because we could feel the gathering of a mighty force. Men drove themselves to unheard of lengths to get war machines designed, to re-tool factories, and to work out schedules which industry itself could hardly conceive. In these last two years has come fruition. The astounding, the incredible productivity of America is revealed as a solid fact . . . not plans and hopes.

The complexity of the war production job is almost beyond the power of mind to comprehend. It involves not only the smoothing out of thousands of operations within a single factory, but the accurate scheduling and meshing together of the output of thousands of independent plants. The intricacy of this pattern is suggested by certain facts concerning









Straight Year

SERVED THE WARFRONTS OF THE WORLD

the Boeing B-29 (Superfortress), which now uses a substantial part of Iron Fireman's war production. The work of 750 engineers for two years was required to design the great bomber. Out of a mountain of blueprints there finally emerged 55,000 numbered parts, produced in scores of different factories. The B-29's power is equivalent to that of four locomotives. Its electrical system includes 150 electric motors. A single gunner can aim and fire the guns of several turrets by remote control, each gun making automatic adjustments to allow for wind resistance, gravitation, temperature, air speed, range, deflection, and many other factors that affect the accuracy of a bullet. To the layman, the B-29 is a bewindering maze of structural, mechanical and electrical magic. Yet this is but *one* of America's weapons.

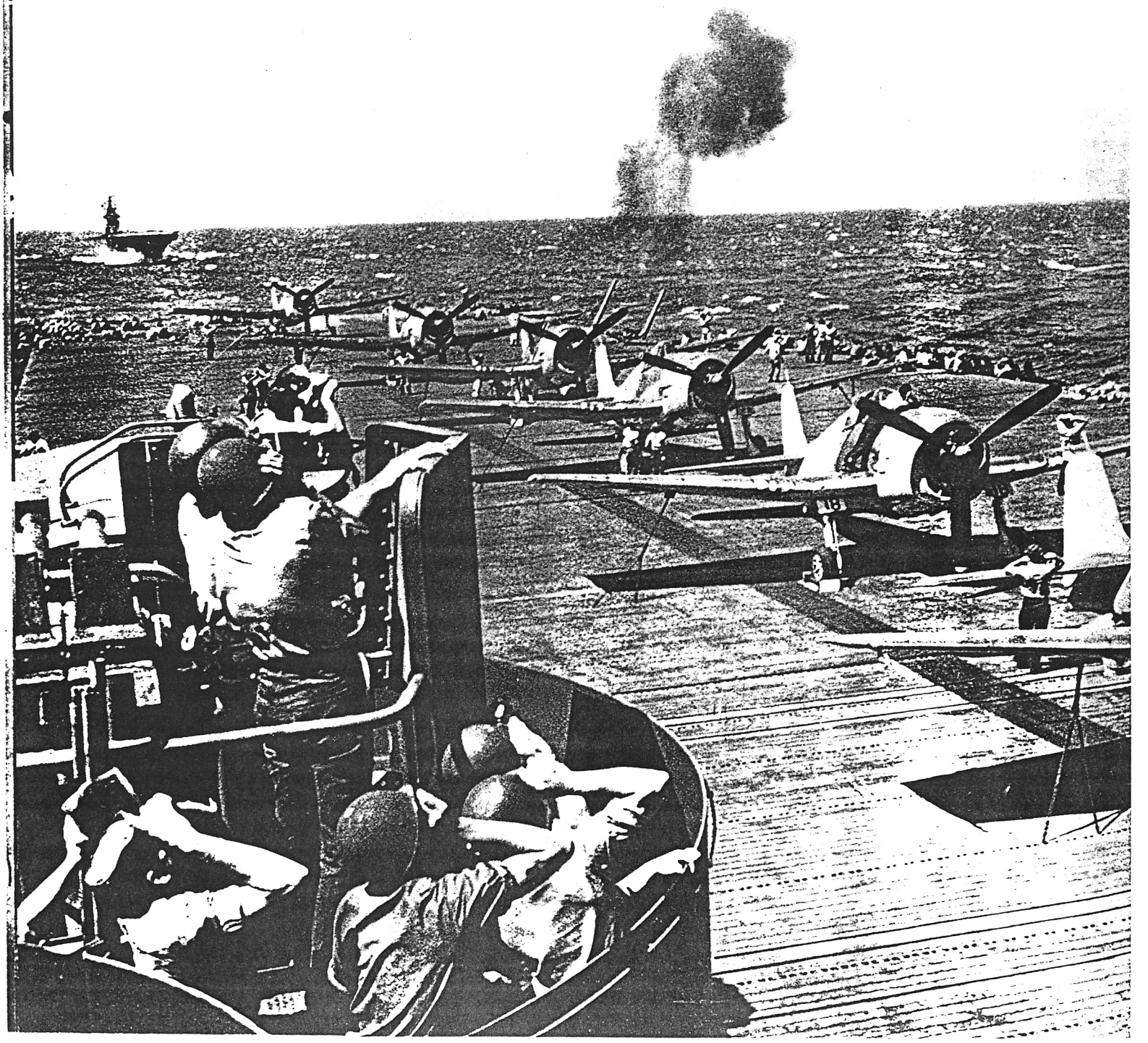
Throughout this whole period of war work Iron Fireman was determined to be a team worker. No army, navy, or maritime schedule was ever held up by the failure of Iron Fireman to meet delivery dates, even when the pressure of war needs forced those dates ahead without warning. In fact, the rate of production has at times been a startling revelation to the procurement branches of the armed services.

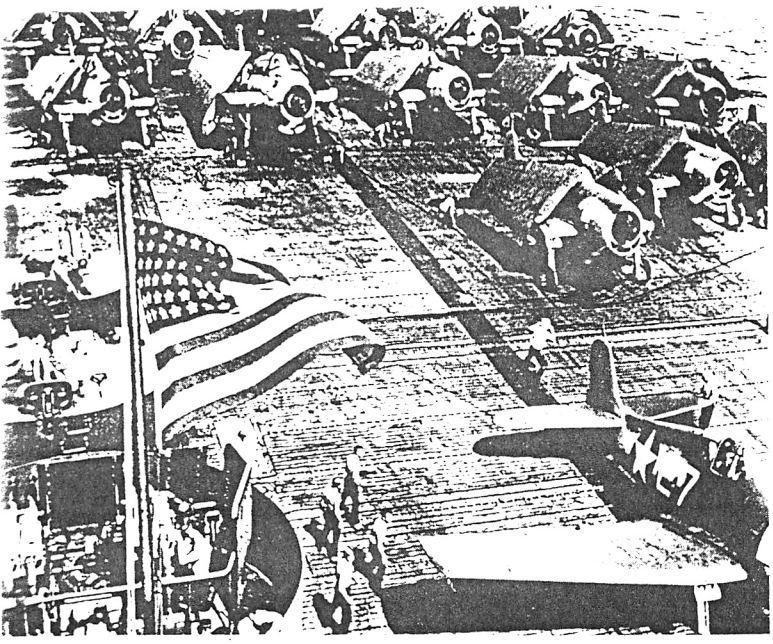
Traveling Deadlines

The Iron Fireman Snow Cruiser program was a good example of a deadline that kept jumping like a jackrabbit, and every jump brought it closer. The contract was received in July. It called for the delivery of a certain number of Cruisers each month from December to March. The machine had to be redesigned and newly engineered throughout by the Iron Fireman staff. After production was under way, Army Ordnance suddenly called for completion of the entire contract by December thirty-first. When schedules had been reshuffled to meet this date, the deadline bounded forward to December fifteenth. It was not long, however, before it again became restless and moved up to December first. This job, remember, involved hundreds of engineering drawings, new tools and fixtures, production and assembly, and the new delivery date for the whole order was now within a few days of the time when production had been ex-

THE FAMOUS GRUMMAN *"Hellcat"* CARRIES MANY VITAL

Iron Fireman rides with the fleet air arm in the devastating strikes from its scores of carriers. There is Iron Fireman workmanship in the far-ranging Hellcats which Admiral Halsey turns loose over the Jap homeland. And they are not just minor parts! Their failure in the terrible stress of battle would cost the lives of our pilots.





pected to *start*. Army Ordnance went all-out in effective co-operation. Together with the Company expediters, they "begged, borrowed, or stole" all critical items necessary. When December first rolled around the entire number of Snow Cruisers stood in neat lines outside the factory . . . waiting for the radio equipment.

Operations have been frequently hampered by the bottleneck in available machine tools. To meet these emergencies, the tool rooms were called upon to accomplish the seemingly impossible, and responded with temporary tools and fixtures that enabled production to get under way long before the delivery of special machines ordered for the job. Even after new machines were installed, their output was steadily improved by devising new fixtures and new methods of operation. Throughout the Iron Fireman shops there are many ingenious mechanical appliances, and even complete machine tools, which were built in the tool rooms to speed production.

Iron Fireman's extremely productive sales organization and effective promotion program has in the past somewhat obscured the engineering and production talent, which is the cornerstone of its sales. One thing that the war emergency has revealed, is the high quality of Iron Fireman production when measured against the best plants in the nation. No slightest let-down in Iron Fireman quality has ever obstructed the flow of war-vital material. Of the machined parts that Iron Fireman makes, many require extreme accuracy (within a tolerance of one ten-thousandths of an inch), yet the scrap record of 1¼ per cent is far below the national average. There is good reason to be proud of the men whose will, enterprise and brains definitely place Iron Fireman in the big league.

For Instance . . .

One bay of the Portland plant is now equipped with new machines and tools for the manufacture of an extremely urgent part for a vitally important unit for B-29 . . . the Oleo landing gear strut support, which bears the entire weight of the plane while landing. It is one of the hardest jobs that Iron Fireman has taken on in its four years of war work. In order to combine lightness and strength the part is made of extremely tough steel . . . and therein lies the difficulty of its manufacture. It requires forty-five machine operations, and all of them are performed with carbide cutting tools.

Iron Fireman assumed responsibility for this product when the contract was transferred from another manufacturer. Production was started in record time, and by working out new machine methods and designing super-efficient tools, the output was greatly increased, and deliveries were made on schedule one month after starting production. Furthermore, the price was substantially reduced to the prime contractor. In this and other instances there is a heartening forecast of Iron Fireman's ability to take an important place in a competitive post-war world.

It's Manpower that Counts

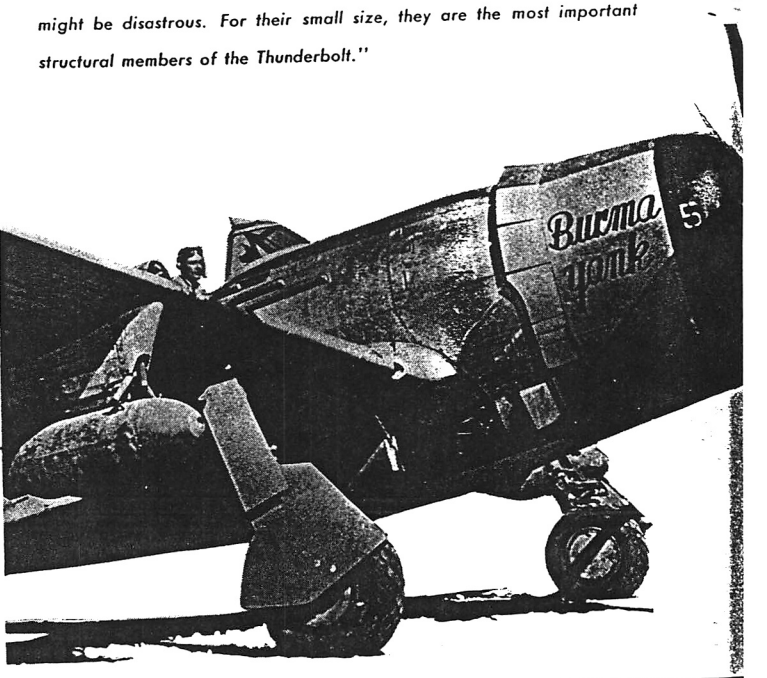
The war period has served to emphasize the fact that it is *men* that make a company, rather than machines. Time after time the men of Iron Fireman, when denied the machines they needed, have smashed bottlenecks by digging something up out of their own inexhaustible resourcefulness. The spirit that exists in the plants is even more remarkable when it is recalled that industrial relations problems have grown enormously during the period of critical labor shortage.

The training of new workmen has become one of the company's most important activities. The emphasis on this is made necessary by the highly skilled type of work that Iron Fireman requires, which has to be developed in the men and women who come to Iron Fireman without any shop experience at all. This in turn throws a heavy burden on the foremen, many of whom have just stepped up into supervisory positions

Thunderbolts

FROM REPUBLIC AVIATION CORPORATION:

"The parts made by Iron Fireman for the Thunderbolt are among the most important in the entire airplane. They are used to attach the wings to the fuselage and for that reason their importance cannot be over-stressed. They are held to very close tolerances and are made of very high tensile strength steel. They are very carefully polished to eliminate any possible surface marks or checks, as these parts are under constant tension and the slightest imperfection could be the start of a split which might be disastrous. For their small size, they are the most important structural members of the Thunderbolt."



Thunderbolts are on every war front in the air forces of the allied nations. The Burma Yank (right), belongs to a fighter group known as the Burma Banshees. It is armed with eight 50-caliber machine guns and two 1000-pound bombs.

for the first time. Early in the expansion program foreman conferences were organized, in which men who knew machine operation thoroughly were now taught to handle people.

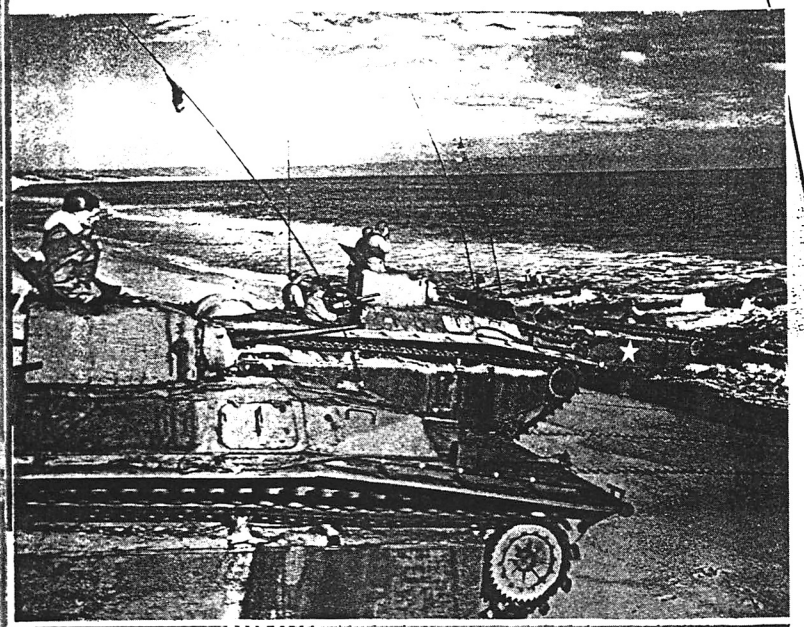
Two monthly publications are devoted to the interests of the employees . . . *The Iron Man*, published in Portland, and *Iron Fire Power* in Cleveland. These magazines develop an *esprit de corps* within the organization, and also serve as a valuable connecting link with the "Firemen" in the service. In them the employees read news of the performance of the weapons they help to make, get information on regulations affecting their work and their travel, and receive well earned praise for their achievements. The papers are informal, interesting and full of personal interest.

Letters from service men often contain references to Iron Fireman products. For example, this one from Navy Aviation Mechanic W. C. Anderson:

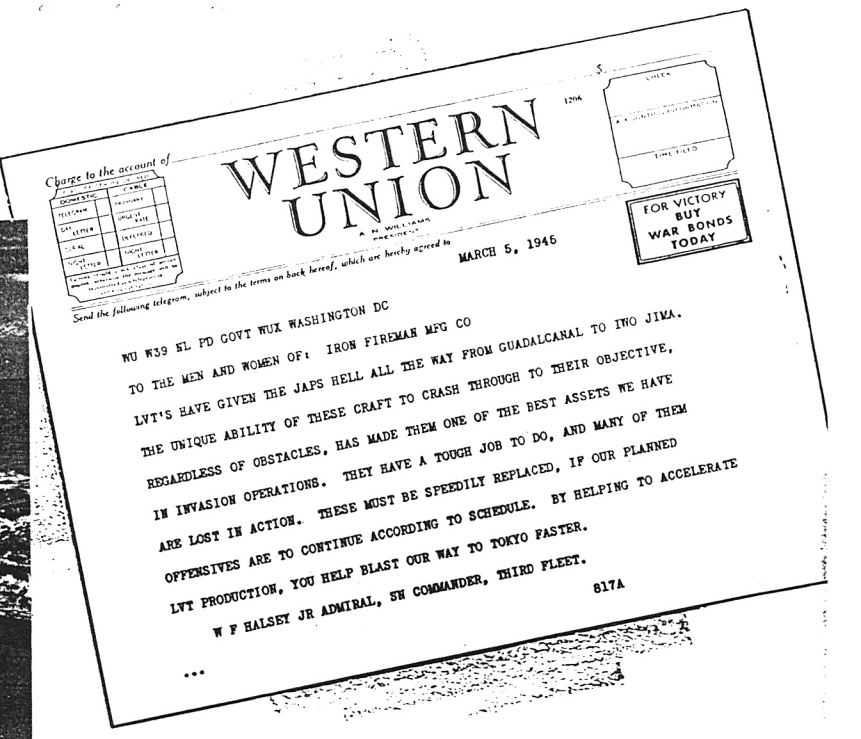
"When I worked at Iron Fireman I often wondered where in the blazes the Budd rings we made went on the airplane engine. Now I know, and can understand why they were so particular about how they were made."

This one is from a Pacific carrier. Ensign J. Burris says:

"Every day our planes take off to go on a mission, and it's really a thrill to know that we of Iron Fireman had a hand in making these planes possible."



The Water Buffalo (known also as the LVT) can cross coral reefs and other submerged obstructions that stop all other types of craft. In these pictures two types of LVT are shown. The heavily armed type carries machine guns and a 37 mm. cannon in an armored turret. Several of the open top type for carrying troops and supplies are seen entering the water. Because of the reefs, only LVT'S and Ducks could land supplies for our first troops on Saipan.



Charge to the account of

WESTERN UNION

A. N. WILLIAMS, PRESIDENT

FOR VICTORY BUY WAR BONDS TODAY

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

MARCH 5, 1945

WU W39 SL PD GOVT WUX WASHINGTON DC

TO THE MEN AND WOMEN OF: IRON FIREMAN MFG CO

LVT'S HAVE GIVEN THE JAPS HELL ALL THE WAY FROM GUADALCANAL TO IWO JIMA.

THE UNIQUE ABILITY OF THESE CRAFT TO CRASH THROUGH TO THEIR OBJECTIVE,

REGARDLESS OF OBSTACLES, HAS MADE THEM ONE OF THE BEST ASSETS WE HAVE

IN INVASION OPERATIONS. THEY HAVE A TOUGH JOB TO DO, AND MANY OF THEM

ARE LOST IN ACTION. THESE MUST BE SPEEDILY REPLACED, IF OUR PLANNED

OFFENSIVES ARE TO CONTINUE ACCORDING TO SCHEDULE. BY HELPING TO ACCELERATE

LVT PRODUCTION, YOU HELP BLAST OUR WAY TO TOKYO FASTER.

W F HALSEY JR ADMIRAL, SW COMMANDER, THIRD FLEET.

817A

...

SEA-GOING TANK I

Iron Fireman has been a producer of precision parts for the famed "Water Buffalo," developed by the Food Machinery Corporation, since an initial contract the latter part of 1943. This was one of America's most spectacular "secret weapons" when the amphibious re-conquest of the Pacific began. Its effectiveness in the South Pacific campaigns caused military officials to place the production of LVT's under Presidential priority.

The daring, life-saving performances of this rugged invasion craft, the easy surmounting of coral-reef obstacles, the delivery of troops and reinforcements, have proved history-making at Tarawa, New Britain, Bougainville, Guam, Saipan, Leyte, Biak, and Iwo Jima.

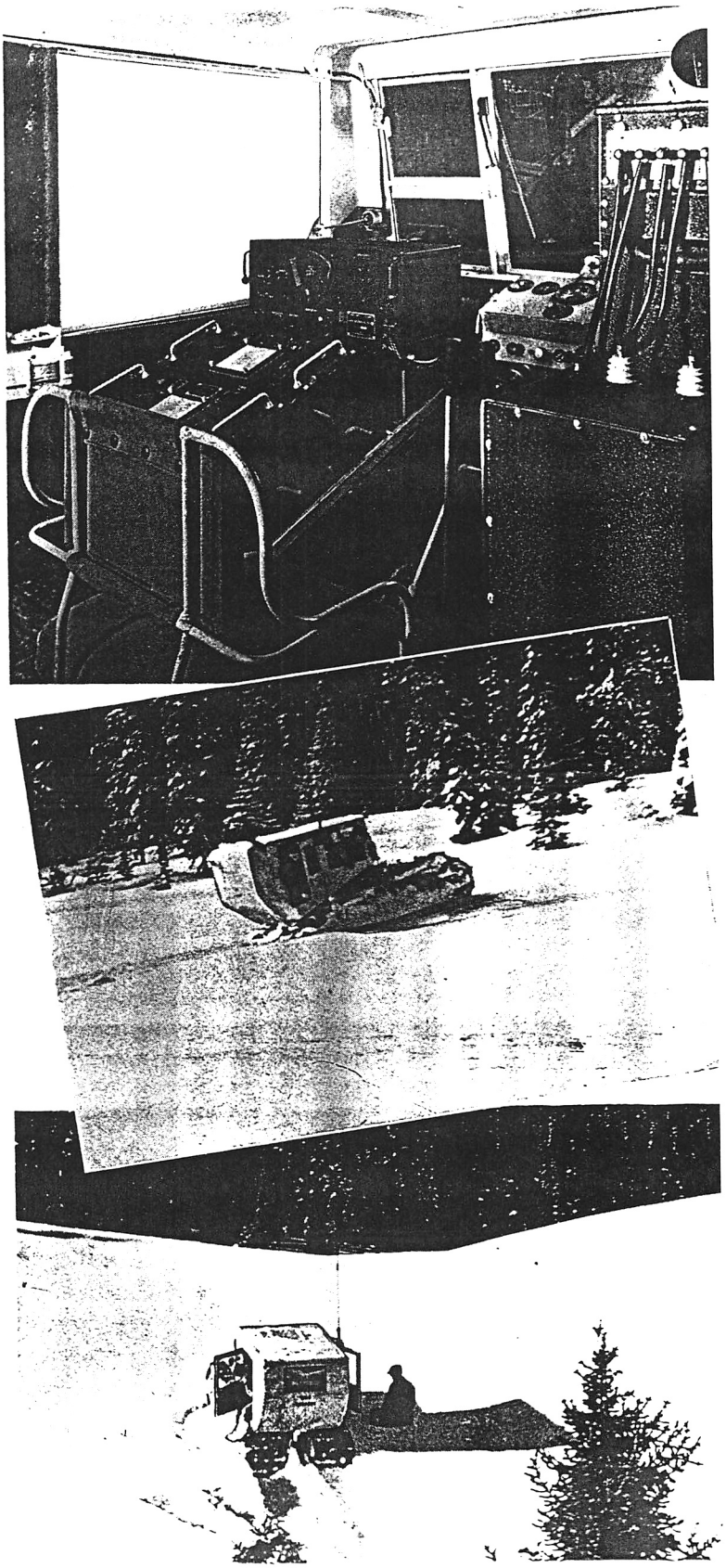
A navy announcement revealed an unprecedented combat demonstration of the LVT in the Leyte campaign. A surprise assault was made 10 miles below the vital enemy-held port of Ormoc on the west

transport as much as 4000 pounds in deep snow and up 35° grades. The light steel cab, heated and insulated, provides room for four men, including the driver. When carrying injured men it will accommodate two litter patients in addition to the driver. Cab windows can be pushed out for emergency exit, and the whole cab can be readily removed to facilitate transport by air. Each cruiser is radio-equipped for two-way communication.

The Army model of the Snow Cruiser was based on a design originated by the Portland engineering department of the U. S. Forest Service. When war brought arctic operations on a large scale the need for such a vehicle became very urgent. Army requirements made it necessary to re-design the tractor throughout. This work was accomplished by Iron Fireman engineers, working against very severe time limitations. A separate unit of the Portland plant was set aside for production, and capable men were assigned to a job which at times had all the ear-marks of utter impossibility, due to the unexpected and drastic revision of the delivery date. Nevertheless, the delivery date was met, even though the time originally allotted was cut in half.

There was little about the Snow Cruiser program that looked inviting to Iron Fireman, other than the obligations of good citizenship. The volume was small, the detailing was enormous, and procurement of critical materials was bound to be difficult. To throw all of this into a plant already bursting with important war production, could only mean that the management had complete faith in the loyalty and ability of its men. That faith was fully justified.

Below, interior of the cab, showing the driver's seat. The other two pictures show tractor in action. Note man standing hip deep in soft snow while tractor rests on surface.



PRESIDENT'S ANNUAL REPORT

To the Stockholders:

With the allied military machine requiring more and more war materiel, the main objective of the entire Iron Fireman organization for the year 1944 has been "MEET WAR PRODUCTION DELIVERY SCHEDULES." The result of the efforts of our personnel can be determined from the fact that eliminating the operations of the marine engine plant that was destroyed by fire on February 2, 1944, which contributed so heavily to the sales volume of 1943, our volume for the two remaining plants, the main plant at Portland, Oregon, and the Cleveland, Ohio, plant, was the largest in the Company's history. These two manufacturing units increased their war production volume for the year 1944 by 88% over 1943.

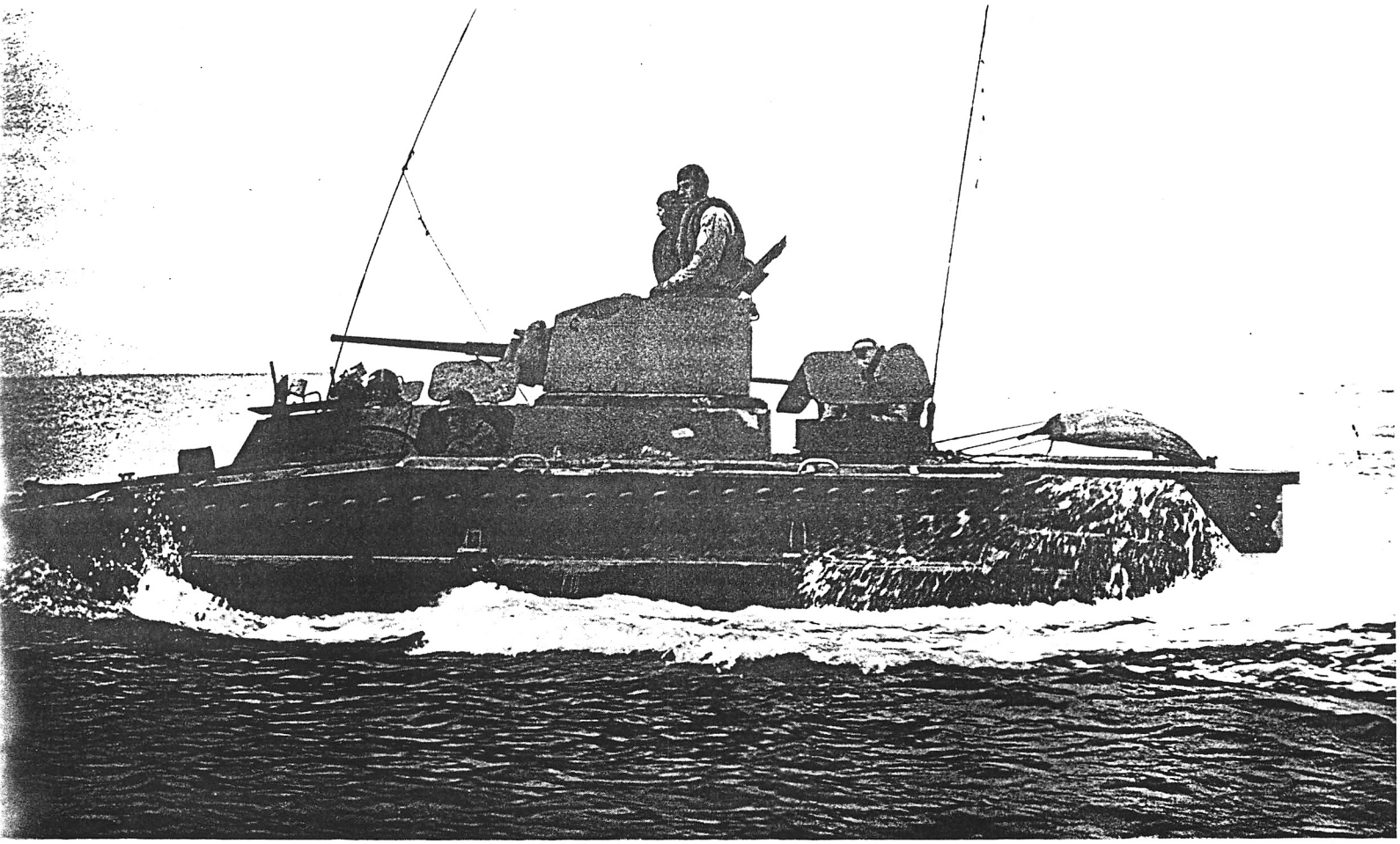
Iron Fireman Profits Again High

Total sales for 1944 amounted to $18,659,321 which was the largest in the Company's history outside of the year 1943 when marine engine sales alone amounted to $25,892,888. Net profits for the year 1944 totaled $668,838 which was after providing $1,720,367 for Federal and Canadian income and excess profits taxes.

The Company's increase in volume at the Main plant and the Cleveland plant, with the resultant production efficiencies, permitted it to make substantial reductions in the prices of articles produced. In addition to voluntary reductions in prices on future contracts, refunds were made to Government agencies and prime contractors on completed work, notable among these being a $350,000 refund to the United States Navy in connection with the manufacture of cast steel wedge gate valves. No provision was made against 1944 profits for a renegotiation refund because with the voluntary reductions in prices and with the refunds that were made during the year, the Management is of the opinion that the amount of profit it retained is fair and reasonable and that, therefore, no provision is required.

The following schedule summarizes the results of the Company's operations for 1944 and the three preceding war years:

	1944	1943	1942	1941
Sales	$18,659,321.22	$37,028,460.58	$15,092,169.59	$ 9,427,392.15
Costs, expenses, etc.	16,270,115.15	32,687,925.35	13,872,461.36	8,111,156.64
Profit before income taxes and postwar reserve	2,389,206.07	4,340,535.23	1,219,708.23	1,316,235.51
Federal and Canadian income taxes	1,720,367.66	3,189,685.94	713,061.86	663,773.67
	668,838.41	1,150,849.29	506,646.37	652,461.84
Postwar reserve	.....	250,000.00	15,000.00	.....
Net profit	$ 668,838.41	$ 900,849.29	$ 491,646.37	$ 652,461.84
Net profit per share of common stock	$ 1.86	$ 2.50	$ 1.37	$ 1.81

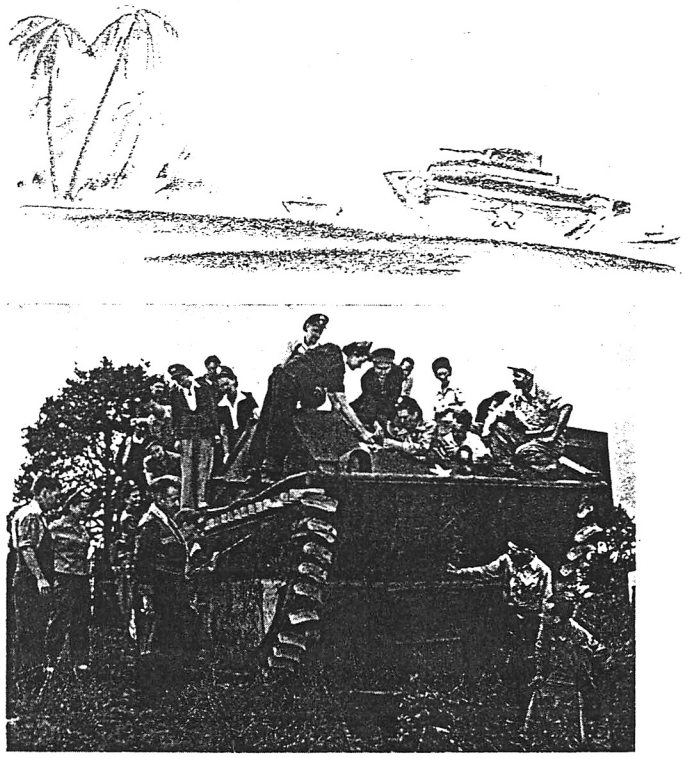


AINFUL SURPRISE TO JAP

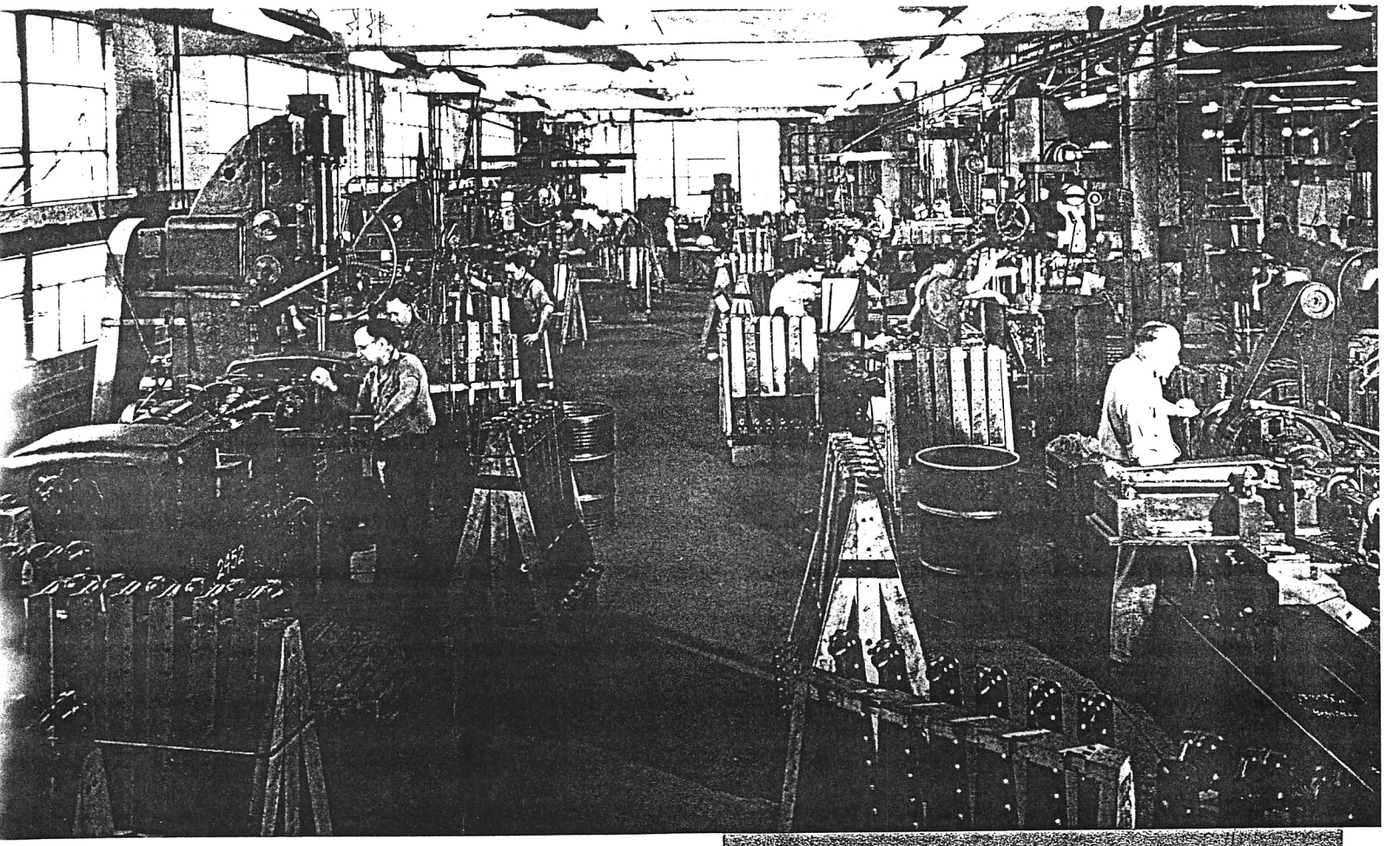
coast—the attack which broke the Jap's back on Leyte. Ridden by American cavalrymen, in a daring amphibious flanking maneuver, the heavily armed Buffaloes came around the southern horn of Leyte on a 125-mile trip, the longest ever made by these formidable craft.

Against the island of Makin the Water Buffalo proved itself to be the finest amphibious vehicle in the world. Pfc. Barney Miller tells: "Down at the extreme western tip of the island, the surf was high . . . too high for successful operations, the Japs thought. But the American forces, using the tractors, swept through the surf, knocked out the weak Jap defense, and 'opened the gate' to allow troops to pass into the lagoon and land under ideal conditions.

"That is the story of the Makin Island campaign. The Jap forces were strong . . . The American forces light . . . but with the use of the amphibious tractor, the Americans were able to land where they pleased."



The battle-scarred hull of a Water Buffalo that landed on Tarawa was recently displayed at the Portland plant. The men and women who helped build it find plenty of evidence of Jap marksmanship.



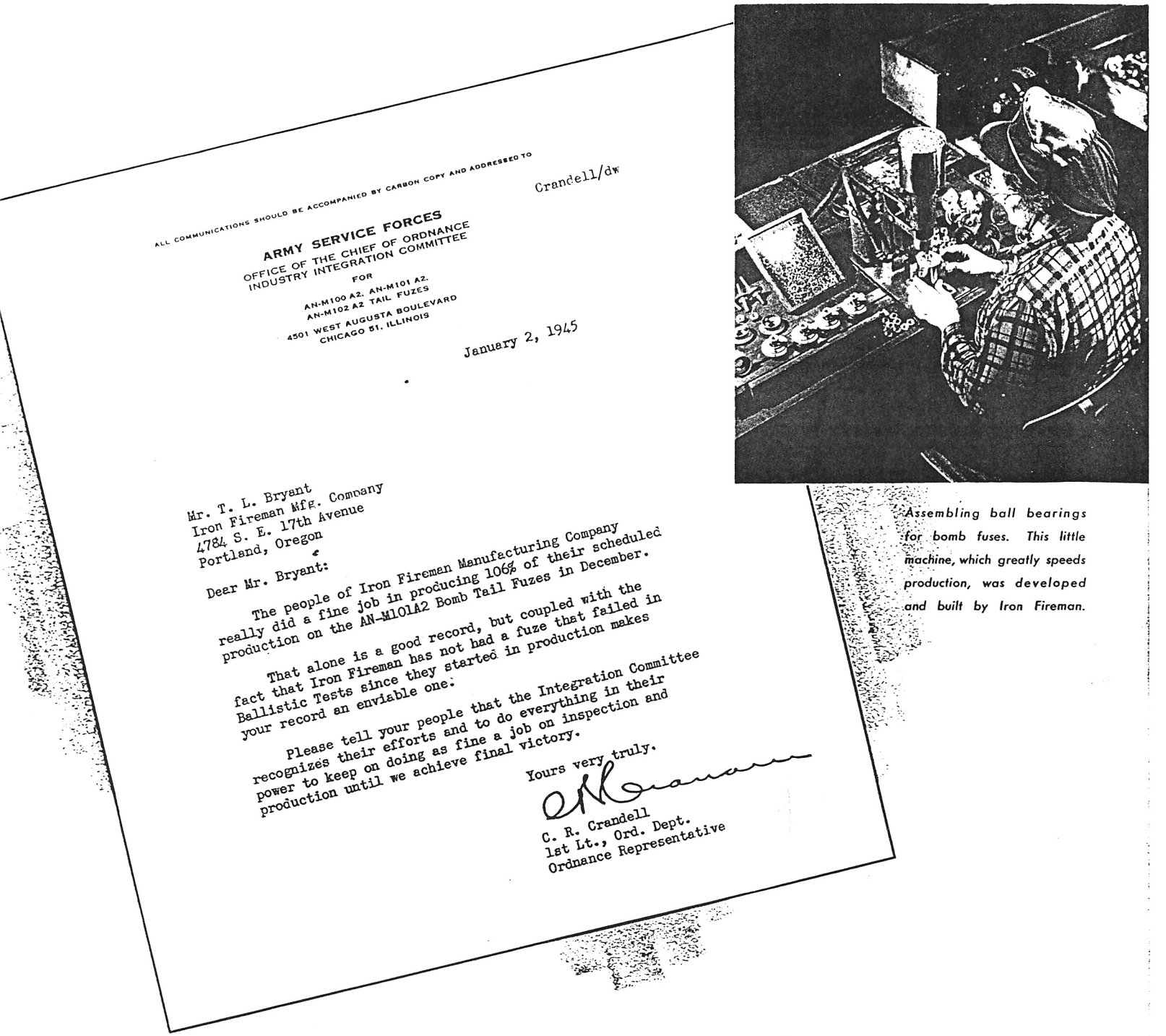
Above, production line working on landing gear struts for B-29. Below, a scene in the tool room, where precision tools and fittings are made for the machines on the production lines. From the tool rooms has come much outstanding work, making Iron Fireman's production record possible.

Annual Dividend of $1.20 per Share Voted for 1945

The 1944 profits equalled $1.86 per share on the 359,910 shares outstanding. At a meeting held on February 16, 1945, the Board of Directors declared a regular annual dividend of $1.20 per share payable in quarterly installments of $.30 each. This dividend will be paid out of 1944 earnings and the dividend schedule for 1945 is as follows:

Mar. 14, 1945, to holders of record Feb. 27, 1945
June 1, 1945, to holders of record May 10, 1945
Sept. 1, 1945, to holders of record Aug. 10, 1945
Dec. 1, 1945, to holders of record Nov. 10, 1945

As of December 31, 1943, the Company had provided $265,000 for estimated additional costs arising out of war. No provision was made for this purpose during the year 1944, as the above amount was considered adequate in the light of present conditions.



ALL COMMUNICATIONS SHOULD BE ACCOMPANIED BY CARBON COPY AND ADDRESSED TO

ARMY SERVICE FORCES
OFFICE OF THE CHIEF OF ORDNANCE
INDUSTRY INTEGRATION COMMITTEE
FOR
AN-M100 A2, AN-M101 A2,
AN-M102 A2 TAIL FUZES
4501 WEST AUGUSTA BOULEVARD
CHICAGO 51, ILLINOIS

Crandell/dw

January 2, 1945

Mr. T. L. Bryant
Iron Fireman Mfg. Company
4784 S. E. 17th Avenue
Portland, Oregon

Dear Mr. Bryant:

The people of Iron Firemen Manufacturing Company really did a fine job in producing 106% of their scheduled production on the AN-M101A2 Bomb Tail Fuzes in December.

That alone is a good record, but coupled with the fact that Iron Fireman has not had a fuze that failed in Ballistic Tests since they started in production makes your record an enviable one.

Please tell your people that the Integration Committee recognizes their efforts and to do everything in their power to keep on doing as fine a job on inspection and production until we achieve final victory.

Yours very truly,

C. R. Crandell
1st Lt., Ord. Dept.
Ordnance Representative

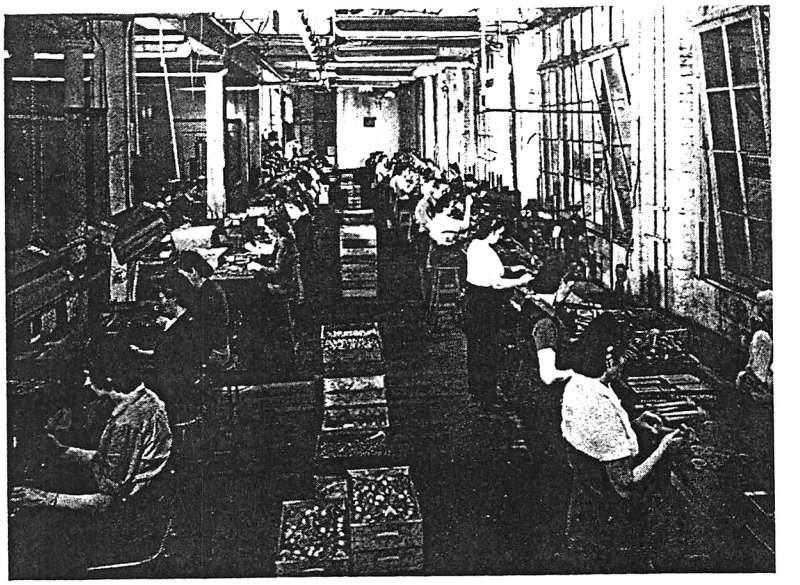
Assembling ball bearings for bomb fuses. This little machine, which greatly speeds production, was developed and built by Iron Fireman.

At December 31, 1944, the plant facilities of the Company had a net book value of $1,464,679 as follows:

	Facilities for Commercial Work	*Facilities for War Work*	*Total*
Assets at cost	$ 1,451,731	$ 1,296,407	$ 2,748,138
Reserve for depreciation and amortization	595,253	688,206	1,283,459
Capital assets less reserves	$ 856,478	$ 608,201	$ 1,464,679

The net book value of the war facilities at the end of 1944 shows a reduction from the end of the prior year of $421,719. This is due to two causes: first, the fact that these facilities are covered by approved Certificates of Necessity and are, therefore, being amortized over a five year period; and second, because the fire at the marine engine plant resulted in reducing the book value of those facilities to a large extent. In that portion of the building and with the equipment remaining at the marine engine plant, we

Wing strut department. These small but important parts require many drilling and machining operations.



Assembling bomb fuses.

carried on with war work immediately following the fire and these facilities are now operating profitably and are doing their part in the production of materiel necessary for the war effort.

As of August 21, 1944, the Company converted its regular "V" Loan to a "VT" Loan Agreement. The advantage of this type of loan over the ordinary "V" Loan is that during a period of termination of Government contracts, the Government financing continues under the "VT" Loan and permits private industry to use its regular bank credit to assist in financing its peacetime operations.

We enter the year 1945 with a heavy backlog of war orders. The principle contracts we will be working on are for the manufacture of parts and assemblies for the B-29 Super-Fortress and the production of Bomb Fuzes for 500 pound bombs. Both of these are "must" programs, and should continue to the end of the war.

Iron Fireman Accepts Challenge

The entire Iron Fireman organization has accepted the challenge placed upon American industry to meet the overwhelming requirements for war materiel. Many of our former personnel are now in the armed forces and their places have been filled by women and inexperienced workers, yet the flow of production has increased. This has only been possible through the utmost cooperation of every member of the organization.

Until the war is over, our single purpose will be to do a better job than we did before, a better job than we thought it possible to do before. When the peace is won, we intend to continue doing a better job. This intent will be backed by improved facilities, improved methods and procedures and with the experience gained in twenty years of leadership in the stoker industry.

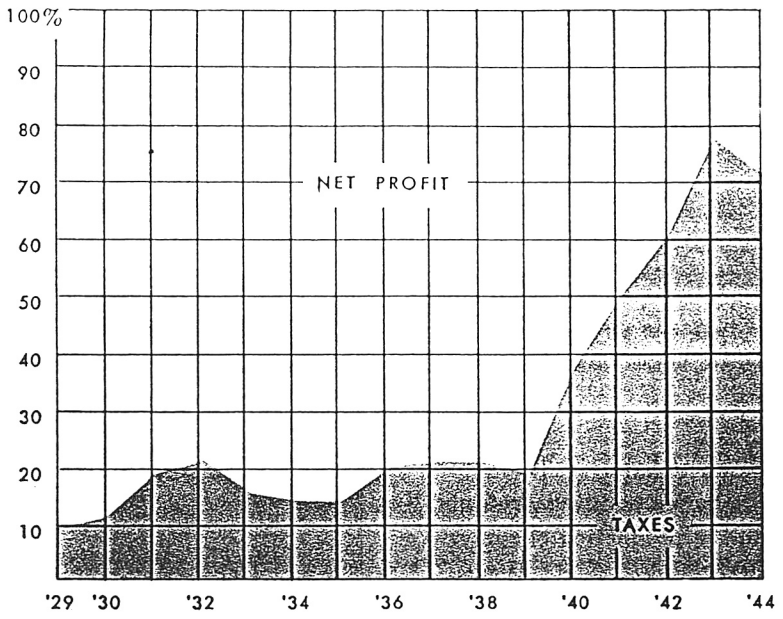
Respectfully submitted,

T. H. Banfield

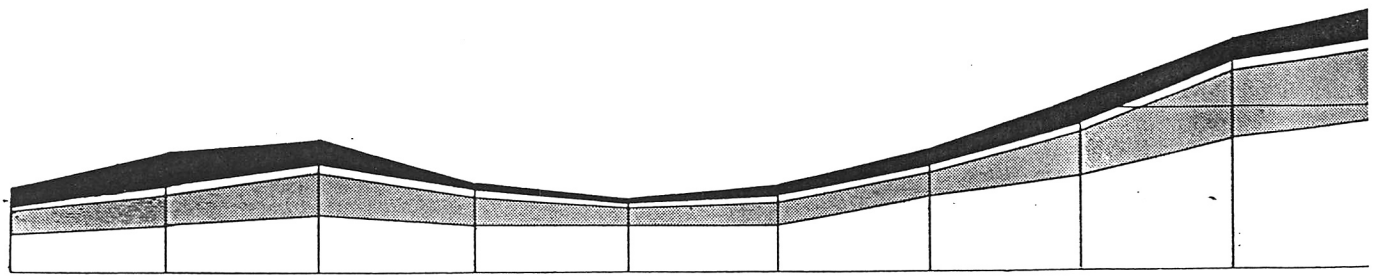
Portland, Oregon
February 26, 1945

President.

A QUICK PICTURE OF IRON FIREMAN'S



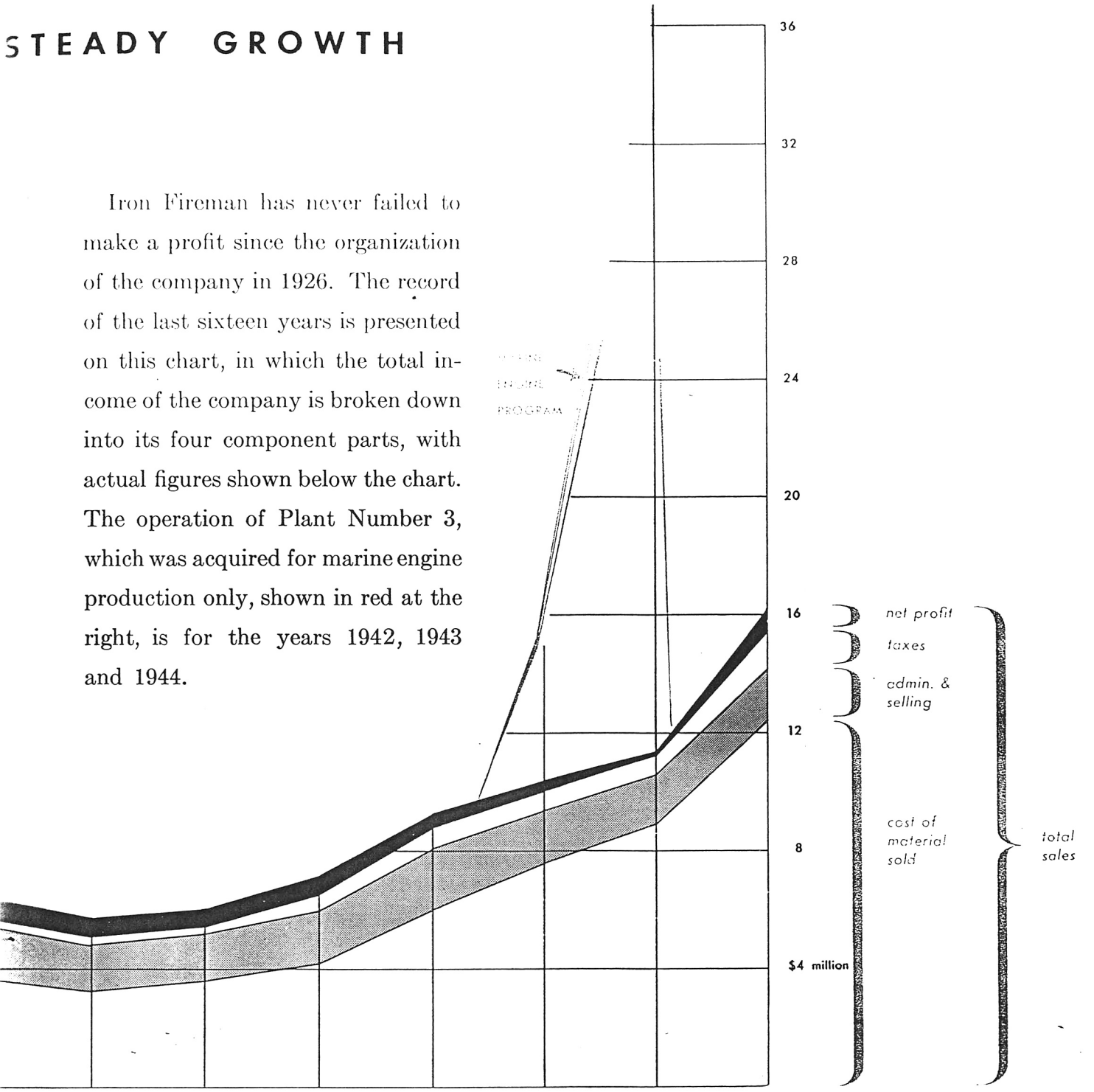
After paying the costs of doing business, there remains that part of the company income known as "profit before taxes." This chart shows how profit before taxes has been divided between taxes and net profit during the last sixteen years.



1929	1930	1931	1932	1933	1934	1935	1936	1937
$ 3,011,937	$ 3,269,157	$ 2,235,255	$ 1,870,751	$ 2,214,005	$ 3,188,388	$ 4,327,807	$ 5,811,331	$ 6,538,993
770,947	440,060	90,917	78,679	330,784	521,708	604,646	774,787	711,460
83,000	54,000	22,102	20,700	64,441	85,329	99,439	193,265	191,418
743,074	1,136,056	787,141	656,217	702,097	896,474	1,231,615	1,645,740	1,993,076
1,414,915	1,639,040	1,335,094	1,115,154	1,147,291	1,722,623	2,412,667	3,232,772	3,651,674

STEADY GROWTH

Iron Fireman has never failed to make a profit since the organization of the company in 1926. The record of the last sixteen years is presented on this chart, in which the total income of the company is broken down into its four component parts, with actual figures shown below the chart. The operation of Plant Number 3, which was acquired for marine engine production only, shown in red at the right, is for the years 1942, 1943 and 1944.



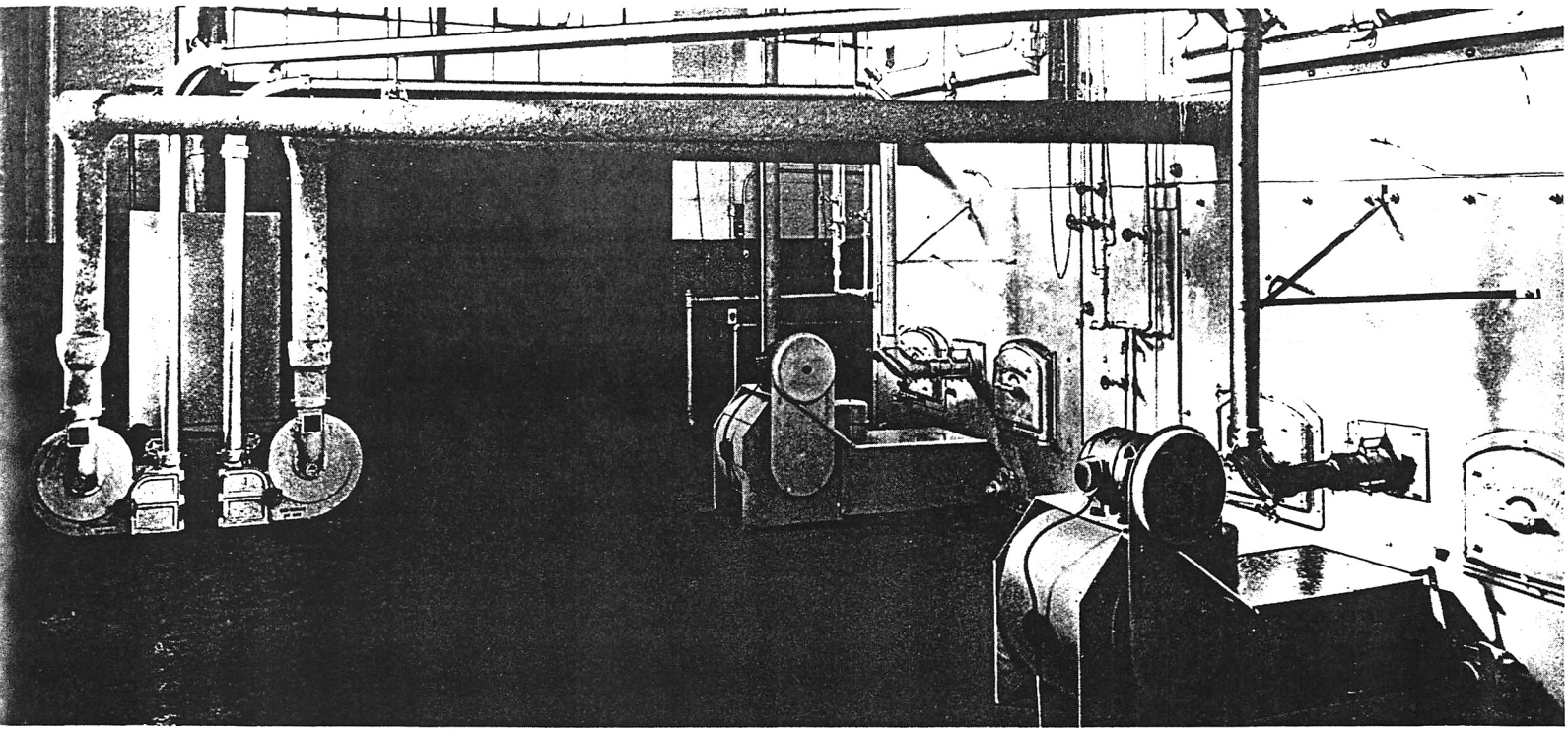
938	1939	1940	1941	1942	1943	1944	
$ 5,664,425	$ 5,952,712	$ 7,232,803	$ 9,427,392	$10,086,558	$11,135,572	$16,049,321	SALES
606,901	611,762	721,308	652,461	383,996	202,145	559,631	NET PROFIT
162,065	146,329	427,688	663,773	566,051	431,686	1,389,024	TAXES
1,591,163	1,715,561	1,901,716	2,134,777	1,616,277	1,598,978	1,943,436	ADMINISTRATION AND SELLING
3,328,780	3,503,483	4,220,268	6,010,209	7,611,573	8,874,985	12,363,853	COST OF MATERIAL SOLD

— MARINE ENGINE PROGRAM —

$ 5,005,611	$25,892,888	$ 2,610,000	SALES
107,650	698,704	109,207	NET PROFIT
205,010	2,757,999	331,343	TAXES
150,030	394,303	33,969	ADMINISTRATION AND SELLING
4,526,166	21,807,591	2,132,204	COST OF MATERIAL SOLD

. . . and Meanwhile

THOUSANDS OF IRON FIREMAN STOKERS ARE FEEDING THE FIRES OF INDUSTRY



Iron Fireman Pneumatic Spreader stoker in the plant of the Belden Manufacturing Co., Richmond, Indiana.

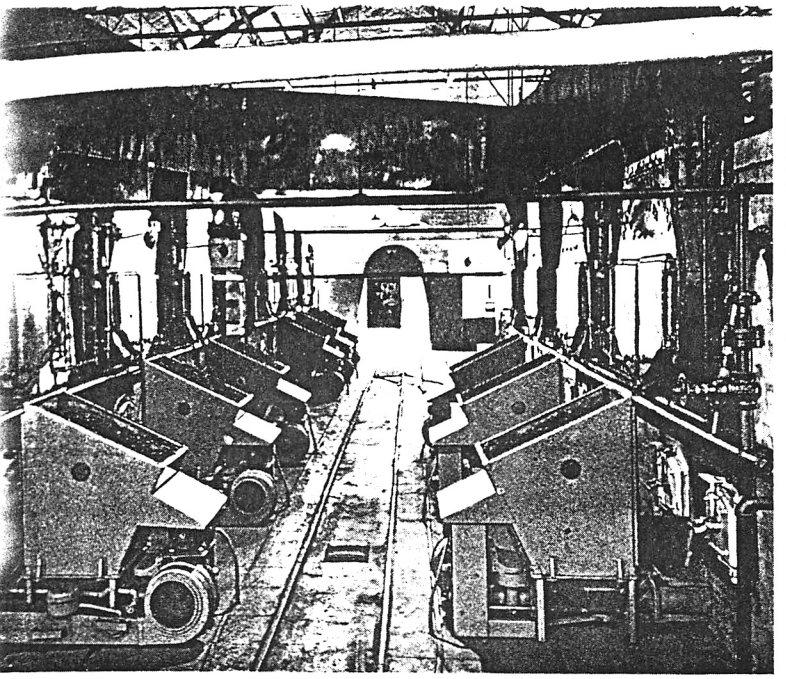
Twenty-two years of uninterrupted national advertising have made the Iron Fireman known throughout America as "the machine that made coal an automatic fuel," but it took the war to make Iron Fireman industrial stokers appreciated for their fuel conservation and labor saving.

War necessities have increased rather than diminished the need for Iron Fireman industrial stokers although domestic models have been frozen. The ability of Iron Fireman industrial stokers to burn local coals of practically any type has also made them a factor in relieving freight congestion.

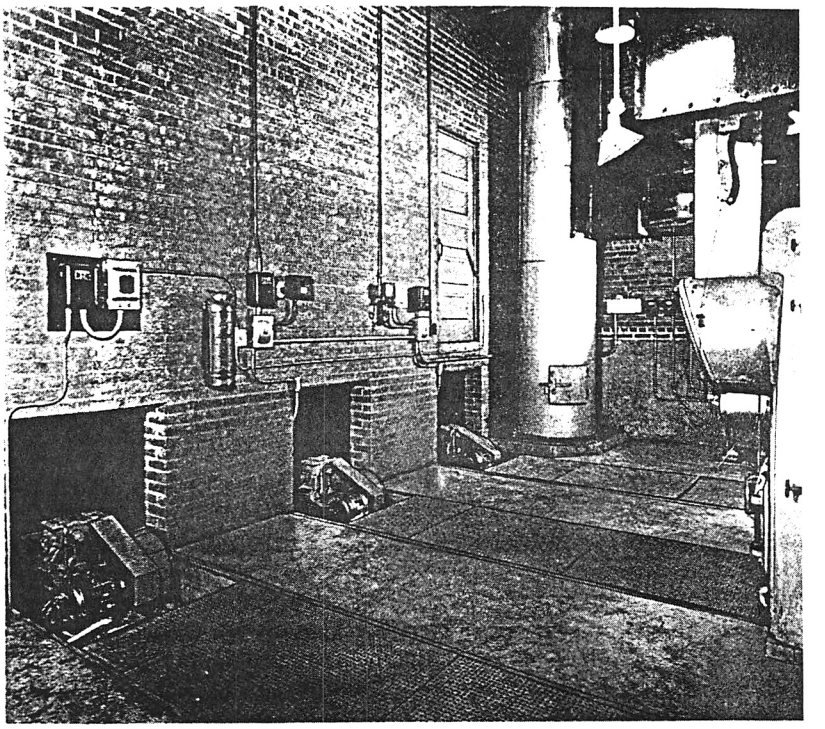
There are a thousand or more types of coal found in the world, ranging from lignite to anthracite, in various ages and qualities and there is a kind or type of Iron Fireman stoker that makes heat out of any of them.

Except for one modification, the pneumatic spreader unit, Iron Fireman stokers all operate on the "forced underfeeding" principle of feeding coal into the fire from below. An automatic air volume regulator that controls the supply of air to the fire enables these stokers to "carburete" the distilled gases in such a manner as to prevent smoke and fuel waste.

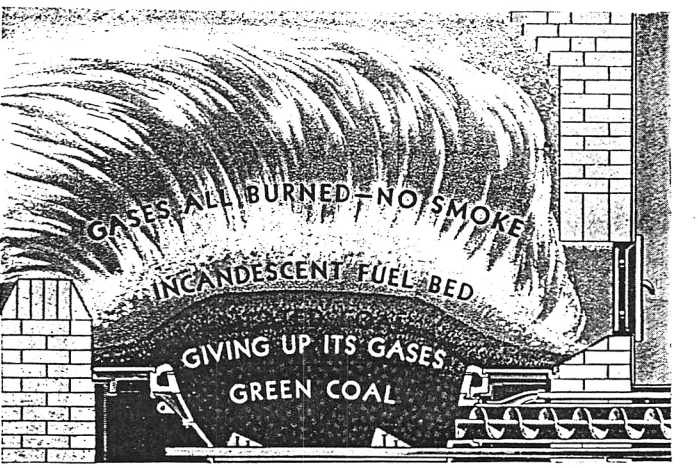
When the Iron Fireman started in 1923 the nation was dotted with huge piles of slack and screening coal which contained as much heat value per ton as lump coal but with no satisfactory method of extracting its heat. These coal wastes were ideal stoker fuel. They have long since been consumed at enormous savings to users and profits to coal mine operators. Most coal used through stokers nowadays is cracked to stoker size at the mine.



Above, battery of Iron Fireman Poweram stokers in oil pumping station of the National Transit Co., Parkers Landing, Pa.



Right, Iron Fireman Coal Flow stokers, which feed directly from coal bunker to boiler, in the Cleveland plant of the Pepsi-Cola Company.



IRON FIREMAN. AN IDEAL FIRE. ABUNDANT RADIANT HEAT. OBSERVE WHAT HAPPENS in the process of "*forced underfiring.*" The feed worm forces coal upward, under the fire. Coal is slowly preheated, the gases thus released passing upward through the fire, where they are burned. Coked coal is burned when it reaches the incandescent fuel bed. No smoke nuisance. No fuel waste.

The demand for Iron Fireman stokers is sustained by their ability to increase boiler efficiency, to prevent fuel waste, to save labor and automatically bring steam production to heat or power-load requirements. Aggressive specialty selling and advertising of these advantages has been continuous.

The Iron Fireman Manufacturing Company started in Portland, Oregon, and its head offices are located there. Its largest production plant is in Cleveland, Ohio, although the original Portland plant is large and complete.

The Iron Fireman business was started with product and market research, the adoption of a brand name, and a policy of liberal consumer advertising. It has kept going on these lines so steadily that it is easily the largest and most consistent advertiser in the heating field.

The product line of the company has been steadily widened. Domestic stokers were introduced in 1928. In 1936 the top end of the line was greatly expanded by the adoption of a new development in stokers, the Pneumatic Spreader, which carries coal to the fire on a stream of pre-heated furnace gases, burns the fines in suspension and the heavies by "forced underfiring." The Pneumatic Spreader stoker has sufficient capacity to fire boilers up to 1,000 hp. with a single unit. Much larger industrial boilers are fired by multiple units.

Iron Fireman has 1500 dealers in the United States and Canada; plants at Portland, Cleveland and Toronto, with retail branches in Chicago, Brooklyn, St. Louis, Milwaukee, Cleveland, Toronto and Montreal.

IRON FIREMAN MANUFACTURING COMPANY

Officers

President and General Manager: *T. H. Banfield*
Vice-President: *E. C. Sammons*
Secretary and Treasurer: *Frank S. Hecox*
Assistant Secretary: *Omar C. Spencer*
Assistant Secretary: *C. W. Snider*
Cleveland Plant Manager: *J. E. Williams*
General Sales Manager: *C. T. Burg*
Coordinator: *T. L. Bryant*
Consulting Engineer: *Haskell C. Carter*
Service Department Manager: *E. C. Webb*

Directors

T. H. Banfield . . . E. C. Sammons . . . Frank S. Hecox
C. T. Burg . . . Mansel P. Griffiths . . . T. Henry Boyd

Voting Trustees

T. H. Banfield . . . E. C. Sammons . . . Frank S. Hecox
Mansel P. Griffiths . . . T. Henry Boyd

Counsel

Hart, Spencer, McCulloch & Rockwood

Transfer Agents and Registrars for Stock

The Bank of California, N.A., San Francisco
Wells Fargo Bank and Union Trust Company, San Francisco
Continental Illinois National Bank & Trust Company, Chicago
First National Bank, Chicago

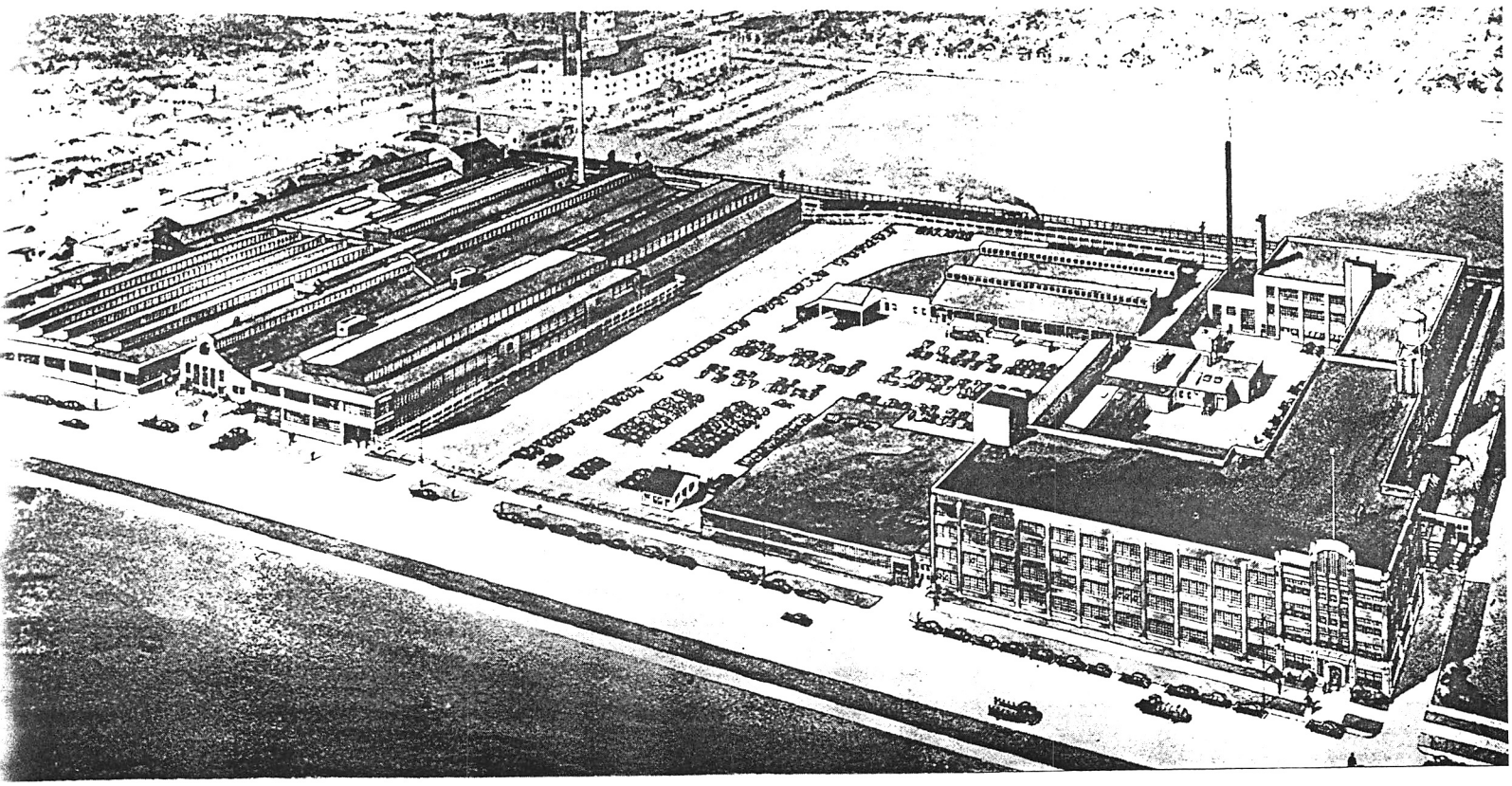
Plants and Offices

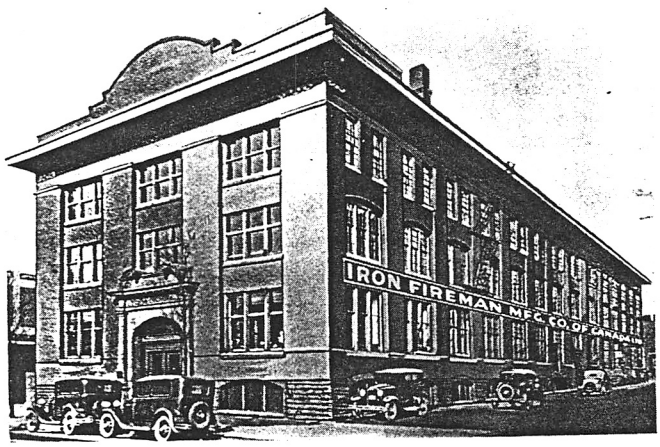
General Offices:
Plant No. 1, 4784 S.E. 17th Avenue, Portland, Oregon

Industrial Division:
Plant No. 3, 1870 S.W. Front Avenue, Portland, Oregon

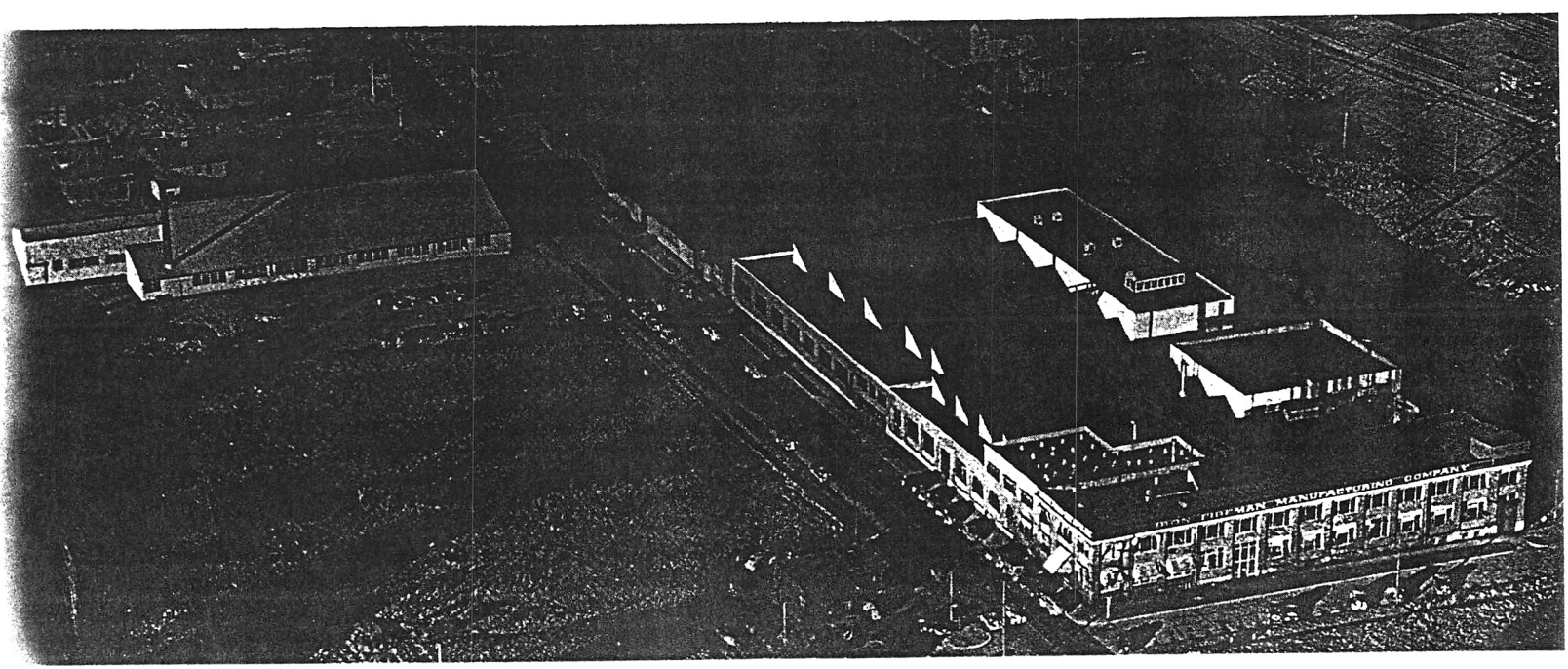
Branch Offices:
3170 W. 106th Street, Cleveland, Ohio
2250 Euclid Avenue, Cleveland, Ohio
429 S. Ashland Boulevard, Chicago, Illinois

Subsidiaries:
420 Lexington Avenue, New York, N.Y.
3114 Washington Avenue, St. Louis, Missouri
1053 Atlantic Avenue, Brooklyn, N.Y.
602 King Street, West, Toronto, Ontario, Canada
4507 W. Wisconsin Avenue, Milwaukee, Wisconsin
1124 Beaver Hall Hill, Montreal, Quebec, Canada





The Cleveland plant (above) is engaged in stoker production in addition to a heavy war schedule. The Toronto plant (left) is an increasingly important factor in Iron Fireman's growing Dominion business. The Portland plant (below) has been expanded to handle a large volume of war work while maintaining stoker production.



BALANCE

IRON FIREMAN MANUFACTURING

Consolidated Balance Shee

ASSETS

CURRENT ASSETS:		
Cash in banks and on hand		$ 1,892,458.05
U. S. War Savings and Canadian Victory Bonds, at cost		103,131.00
Cash surrender value of life insurance policies		224,302.35
Accounts receivable—		
Trade	$ 480,056.58	
War contracts	1,950,952.12	
Contracts receivable on stoker installations	326,767.49	
	$ 2,757,776.19	
Less—Reserve for doubtful receivables	139,254.11	2,618,522.08
Receivable from insurance companies (Note 2)		830,992.56
Inventories of raw materials, work in process and finished products, at average cost or market, whichever was lower		1,939,767.55
Total current assets		$ 7,609,173.59
OTHER ASSETS:		
Investment in associated company, at cost (less than 50% owned)	$ 40,000.00	
Post-war refund of federal excess profits taxes	24,228.17	64,228.17
CAPITAL ASSETS (AT COST):		
Plant sites	$ 130,578.78	
Buildings, machinery and equipment	$ 1,321,153.06	
Less—Reserves for depreciation	595,253.02	725,900.04
Facilities for production of war materials	$ 1,296,406.87	
Less—Reserve for amortization	688,206.33	608,200.54	1,464,679.36
Patents, trademarks and copyrights		1.00
DEFERRED CHARGES:		
Unexpired insurance premiums, prepaid expenses and supplies		61,101.24
		$ 9,199,183.36

PRICE, WATERHOUSE & CO.

AMERICAN BANK BUILDING

PORTLAND 5 OREGON

February 6, 1945

AUDITOR'S REPORT

TO THE BOARD OF DIRECTORS OF

IRON FIREMAN MANUFACTURING COMPANY:

We have examined the consolidated balance sheet of Iron Fireman Manufacturing Company and its subsidiary companies as of December 31, 1944 and the related consolidated statement of profit and loss and earned surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances, and included such tests of the accounting records and other supporting evidence and such other procedures as we considered necessary. Receivables from U. S. Government departments were not confirmed but we satisfied ourselves by other means as to these items.

In our opinion, subject to the comments regarding the amount receivable from insurance companies and the renegotiation of war contracts contained in Notes 2 and 4, the accompanying consolidated balance sheet and related statement of profit and loss and earned surplus present fairly the combined position of Iron Fireman Manufacturing Company and its subsidiary companies at December 31, 1944, and the combined results of their operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Price, Waterhouse & Co.

NO MAN CAN GIVE MORE THAN THIS

Inscribed below are the names of those from Iron Fireman's own ranks who have given most in the service of their country.

DONALD BADER, AAF *(Cleveland)*
Lost his life when his troop ship was attacked in the English Channel, Christmas Day, 1944.

GEORGE CHRISTENSEN, Navy *(Portland)*
Gunner's Mate on the U. S. S. Spence, lost in a typhoon in the Western Pacific.

JOHN KATONA, Paratrooper *(Cleveland)*
Killed in action during the invasion of Normandy, June 24, 1944.

JOSEPH LABODA, JR., Army *(Cleveland)*
Died of wounds received during an infantry action in France, September 20, 1944.

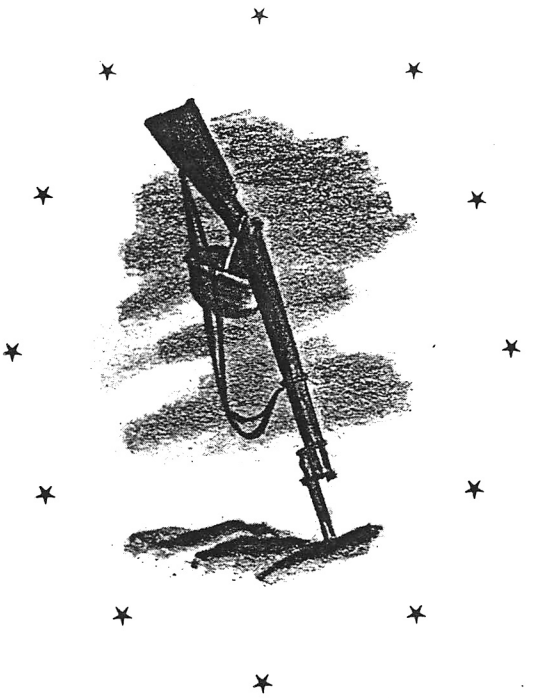
THOMAS PFIFFNER, Lieutenant, AAF *(St. Louis)*
Lost in the air battles over Germany, July 18, 1943.

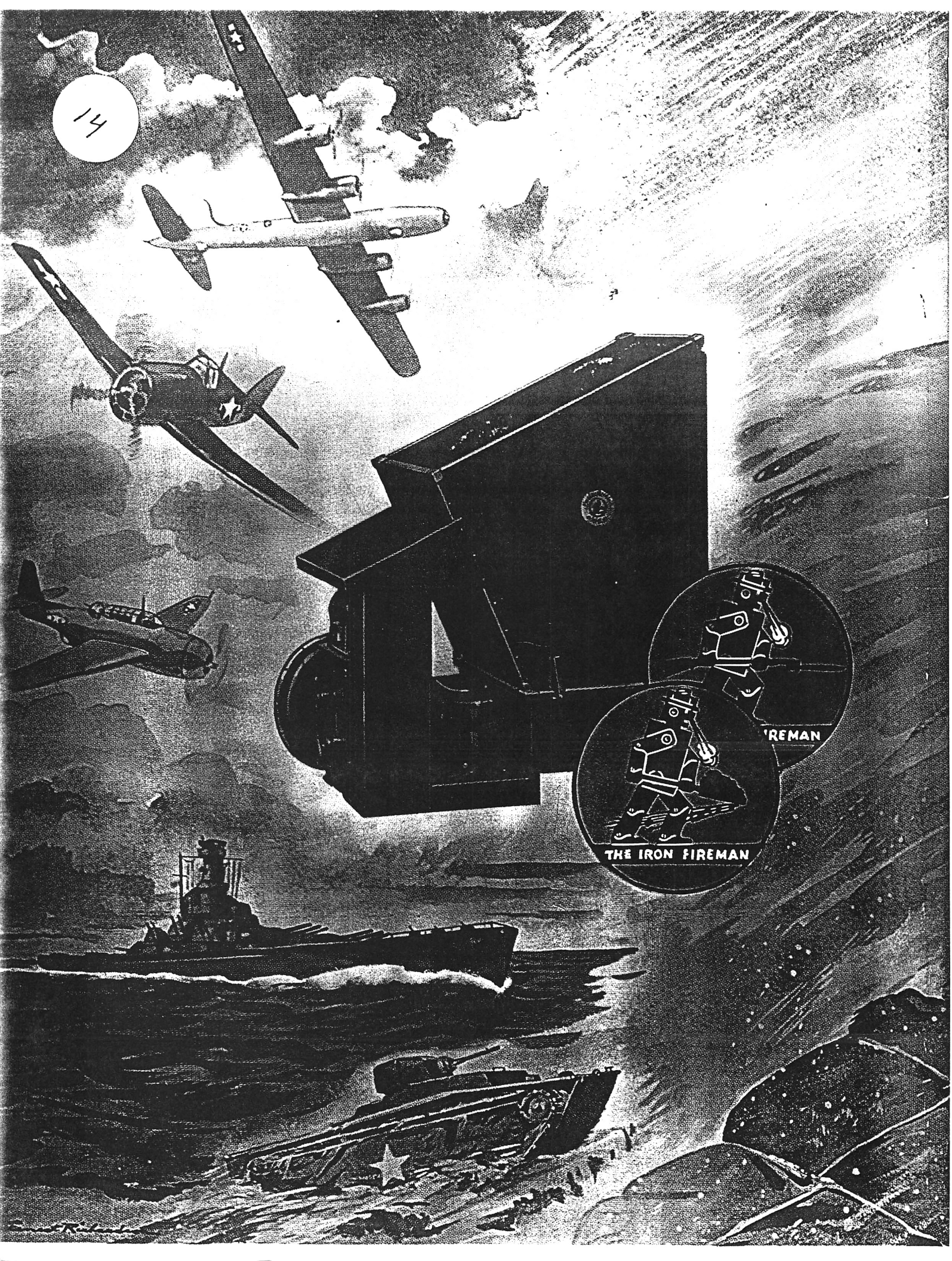
LEROY SADLER, Ensign, Navy *(Portland)*
Carrier Pilot, lost in the Western Pacific in one of the naval actions attending the invasion of the Philippines, March, 1945.

ANTON SCHLECTER, Navy *(Portland)*
Killed in action in the South Pacific, September 24, 1944.

CHARLES SHUTACK, Glider Infantry *(Cleveland)*
Killed in action during the invasion of Normandy, June 9, 1944.

JOSEPH STANEY, JR., Army *(Portland)*
Killed in action in Germany, December 9, 1944.




14
REMAN
THE IRON FIREMAN

HEET

OMPANY AND SUBSIDIARY COMPANIES

of December 31, 1944

LIABILITIES

CURRENT LIABILITIES:		
Notes payable to banks (Note 3)		$ 500,000.00
Accounts payable—trade		821,038.04
Accrued payrolls, taxes and expenses		677,720.93
Reserve for estimated income and excess profits taxes	$ 1,914,000.00	
Less—U. S. Treasury Tax Notes, at cost	220,000.00	1,694,000.00
Total current liabilities		$ 3,692,758.97
DEFERRED FINANCE INCOME		5,844.95
RESERVES:		
For product guarantees and contingencies	$ 26,000.00	
For estimated additional costs arising out of war	265,000.00	291,000.00
CAPITAL STOCK AND SURPLUS:		
Capital stock—		
Common, without par value—		
Authorized....400,000 shares		
Issued.....360,000 shares	$ 1,800,000.00	
Less—90 shares in treasury	450.00	$ 1,799,550.00
Surplus—		
Paid-in	595,650.00	
Earned	2,814,379.44	5,209,579.44
		$ 9,199,183.36

PROFIT AND LOSS

IRON FIREMAN MANUFACTURING COMPANY AND SUBSIDIARY COMPANIES

Consolidated Statement of Profit and Loss and Earned Surplus for the year ending December 31, 1944

Net sales		$18,659,321.22
Deduct:		
Cost of sales	$14,170,553.02	
Depreciation and amortization	341,726.69	
Selling, administrative and general expenses	1,961,182.73	16,473,462.44
Profit from operations		$ 2,185,858.78
Excess of insurance proceeds on buildings and equipment over book value (Note 2)		160,157.69
Other income		81,449.81
		$ 2,427,466.28
Interest paid		38,260.21
		$ 2,389,206.07
Deduct:		
Provision for federal and Canadian income and excess profits taxes, less debt retirement credit of $139,000 and post-war refund		1,720,367.66
Net profit for year 1944		$ 668,838.41
Earned surplus at December 31, 1943		2,577,416.23
		$ 3,246,254.64
Dividends paid in cash		431,875.20
Earned surplus at December 31, 1944		$ 2,814,379.44

Notes to Financial Statements

NOTE 1—Net assets of the Canadian subsidiary, included in the consolidated balance sheet, amount to $591,621.58, of which $581,712.60 are net current and working assets. The profit of this subsidiary amounting to $45,666.95 (U. S. dollars) has been included in the consolidated statement of profit and loss; no dividend was received during the year. The consolidated earned surplus includes undistributed profits of the Canadian subsidiary amounting to $512,801.82 (U. S. dollars).

NOTE 2—The amount receivable from insurance companies represents the book value of the inventories at the engine plant destroyed by fire on February 2, 1944, and the fixed charges and expenses of the engine plant since the fire. The amounts recoverable for the actual cash value of the inventories and in respect of losses under use and occupancy insurance policies are still being negotiated and are not presently determinable.

NOTE 3—The notes payable were issued under a Regulation VT loan agreement for a credit in the aggregate amount of $5,000,000 maturing March 31, 1946, the terms of which provide, among other things, that net current assets shall not be less than $1,500,000 and that, unless prior consent is obtained from the banks, the Company will declare and pay dividends only if earned and not in excess of the present annual rate of $1.20 per share.

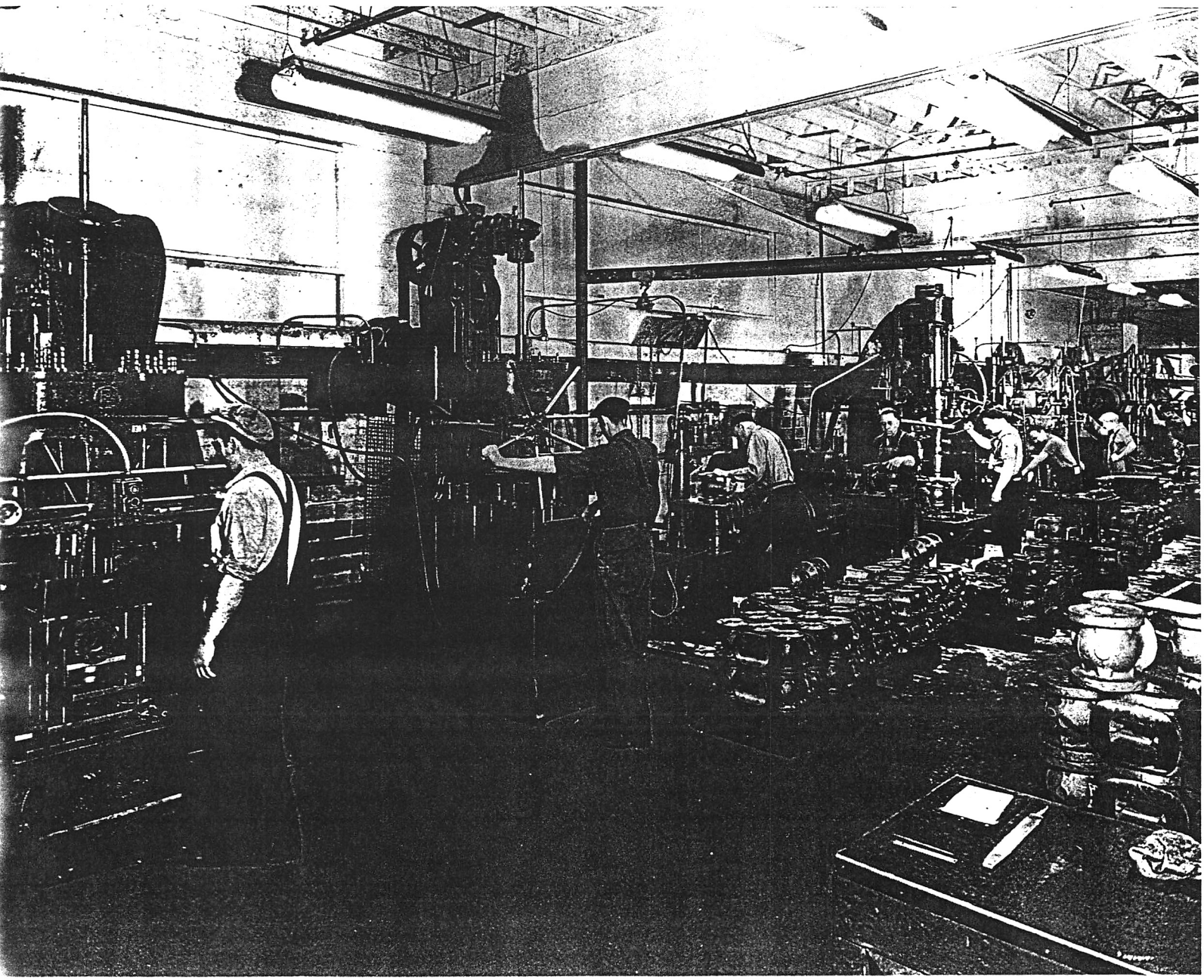
NOTE 4—While the war contract prices for the year 1944 have not been renegotiated, the management is of the opinion that no provision is required.

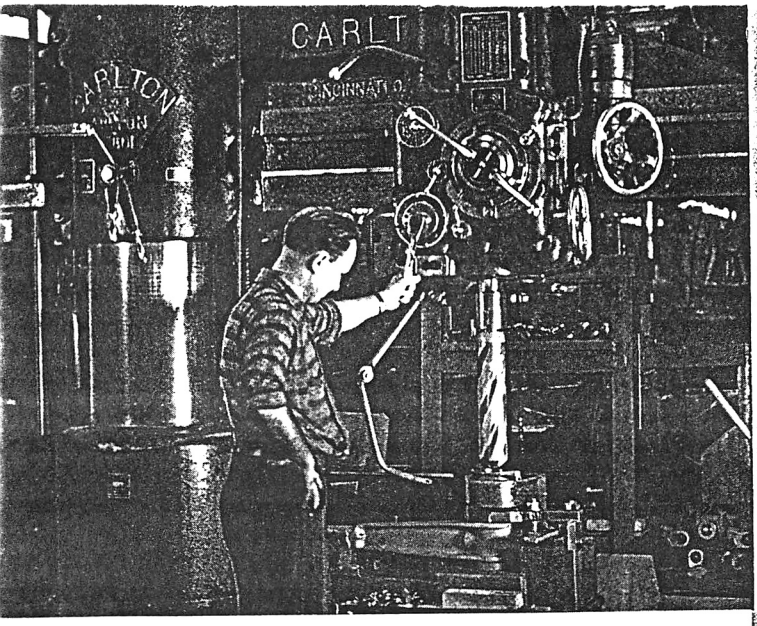
Company Suffers No Loss Due to Marine Engine Plant Fire

The fire that destroyed the bulk of the marine engine plant on February 2, 1944, left the Company with stocks of raw material, finished parts and semi-finished parts together with commitments to subcontractors totaling approximately $3,500,000. An agreement was reached with the United States Maritime Commission whereby our subcontractors were permitted to complete their contracts. These materials to be produced together with those we already had on hand were purchased by the United States Maritime Commission at no loss to the Company or its subcontractors.

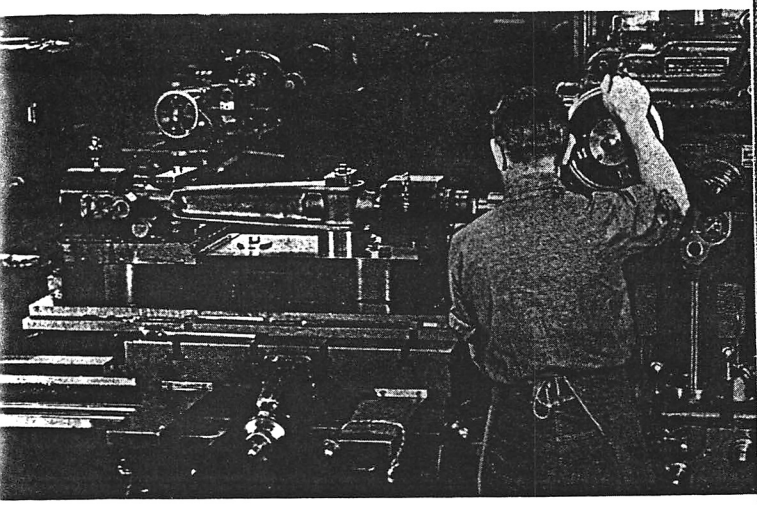
During the year, a settlement was reached with the insurance companies on the loss to the buildings and equipment, and in the latter part of February, 1945, settlements were reached with respect to the

Navy valve production was made possible by ingenious adaptation of ordinary drill presses to take the place of turret lathes, which were not available because of machine tool shortages. A high rate of production is maintained and the quality of the work is superior to that of traditional lathe methods. Valves are of the wedge type, requiring very close fitting parts, and range in size from two-inch to six-inch.

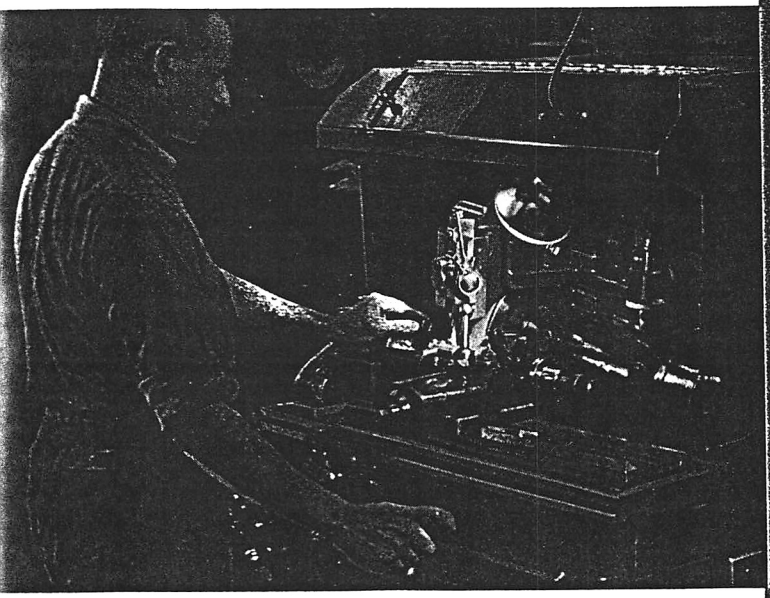




A 2¾ inch core drill rough drilling a Lockheed airplane part. For finish boring, requiring extreme accuracy, the part goes to another machine.



This boring mill is normally associated with tool room work, but due to the close tolerances required on this airplane part it is used in production.



Grinding a special double thread on a motor shaft. Bearing surfaces must be ground within a tolerance of three ten-thousandths of an inch.

stock loss and the use and occupancy coverage that protected us for loss of interrupted profits and fixed and continuing expenses. The total proceeds received from the insurance companies on all types of coverage were in excess of $2,500,000.

Year Ends with Heavy Backlog of Stoker Orders

Despite the increase of 88% over 1943 in war production volume at the main plant in Portland and the Cleveland plant, the stoker sales volume for 1944 was practically the same as for 1943. Unit sales showed an increase of 16% and we ended up the year with a substantial increase in orders on hand. Included in these unfilled orders was a heavy backlog of requests for industrial equipment covered by priorities indicating that the units were for use in essential industries. However, we are unable to fill these orders for the time being because of the urgent need for our plant facilities and manpower for war work. Just as soon as the present requirements for war materiel cease to exist and present Government restrictions on manpower and materials are relaxed, Iron Fireman is ready to convert back to stoker production and, with the experience gained in the manufacture of war products, to resume its leadership in the stoker industry.

We wish to mention our loyal dealer organization which, in spite of the fact that dealers have been unable to obtain a sufficient number of stokers to meet their current requirements, has still maintained the same high caliber of service on stokers installed before the war. Iron Fireman dealers know that their business and ours has been built on service, and they have cheerfully given that extra ounce that counts so much to the consumer during these trying times. The dealer organization is now the largest in the Company's history, and although we have been unable to fill all of the orders for our stoker equipment at the present time, we have maintained our forceful national advertising policy in order to keep the Iron Fireman name before the American buying public.

Plans have been formulated for the expansion of the Company's peacetime operations and our present line will be supplemented with several new products.